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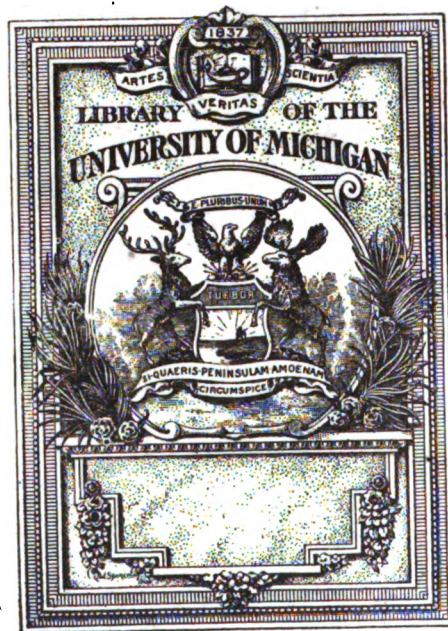
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LIST OF CONTRIBUTORS.

VOLUME XL.

- ASHBURN, DR. PERCY M., Cincinnati, O.
Hernia of the Pregnant Womb, 403.
- AYRES, DR. S. C., Cincinnati, O.
The Non-Operative Treatment of Strabismus, 6.
Torpidity of the Bowels, 453.
An Interesting Case of Ophthalmia Neonatorum, 614.
- BALDWIN, DR. J. F., Columbus, O.
Sarcoma and Erysipelas Toxines, 9.
- BETTMANN, DR. HENRY W., Cincinnati, O.
Cast of the Stomach Vomited by a Child—Specimen, 83.
A Note on Calomel in the Treatment of Typhoid Fever, 650.
- BONIFIELD, DR. CHAS. L., Cincinnati, O.
Fibroid Uterus with Attached Appendages, 200.
Pyosalpinx, 292.
- BOYLAN, DR. J. E., Cincinnati, O.
Acute Mastoid Disease, Result of Erysipelas, 87.
- BREMER, DR. LUDWIG, St. Louis, Mo.
Diabetes: The Diagnostic Value of the Aniline Dyes, 517.
- BRIGGS, DR. ALEXANDER B., New York.
Strontium and Its Salts, 109.
- BRITTON, DR. S. HERBERT, Adelaide, O.
Gualacol, 392.
- BRYAN, DR. F. F., Georgetown, Ky.
Extra-Uterine Pregnancy, 625.
- BUTTEMILLER, DR. J. C., Cincinnati, O.
Primary Carcinoma of Gall-Bladder, 290.
- CADWALLADER, DR. J. C., Norwood, O.
Abdominal Abscess, 457.
- CALDWELL, DR. C. E., Cincinnati, O.
Tracheotomy in Diphtherias, 455.
- CAMERON, DR. OTIS L., Cincinnati, O.
Congenital Absence of Gall-Bladder.—Appendicitis at the Age of Seventy-two.—Carcinoma of Liver and Omentum, 290.
- CHRISTEN, DR. TH. A., Cincinnati, O.
Transient Amblyopia, 1.
- CULBERTSON, DR. L. R., Zanesville, O.
A Remarkable Case of Iodism, Producing Cerebral Compression, 189.
- DANDRIDGE, DR. N. P., Cincinnati, O.
Resection of Tuberculous Head of Femur, 84.
- DAVIS, DR. E. G. Lewistown, Ill.
Diphtheria, 212.
- DEAMS, DR. S. P., Tupper's Plains, O.
Fees for Attending Paupers, 327.
- DEBECK, DR. DAVID, Cincinnati, O.
Ossification of the Choroid, 181.
- DOWLING, DR. FRANCIS, Cincinnati, O.
The Hygiene of Ophthalmia Neonatorum, 595.
Hygiene of Granular Conjunctivitis, with Special Reference to the United States Military Service, 621.
- EICHBERG, DR. JOSEPH, Cincinnati, O.
Ulcer of the Stomach, 288.
Ruptured Tubal Pregnancy, 289.
- FEE, DR. FRANK E., Cincinnati, O.
Wanted—A New Name for a New Form of Insanity, 233.
- FRENCH, DR. E. H., Piqua, O.
Intubation, with Report of Two Cases, 549.
- FREIBERG, DR. ALBERT H., Cincinnati, O.
Innovations in the Treatment of Pott's Disease, 151.
- GOODE, DR. B. P., Cincinnati, O.
Foreign Bodies Swallowed, 85.
- GREIWE, DR. J. E., Cincinnati, O.
Nephritis, 292.
- HALL, DR. RUFUS B., Cincinnati, O.
Intra-Ligamentous Ovarian Tumor, 141.
Gall-Stones, 200.
Suppurating Ovarian Tumor, 235.
Intra-Ligamentous Cyst.—Tubo-Ovarian Cyst, 289.
Multilobular Fibroid Tumor, 373.
- HANSON, DR. D. S., Cleveland, O.
Treatment of Fracture of Patella with Glue Splint, 551.
Has the Use of Intestinal Antiseptics in Typhoid Fever a Rational Physiological Basis? 605.
- HEADY, DR. J. F., Cincinnati, O.
Ulcer of the Duodenum—Specimen, 580.
- HILL, DR. R. C., Cincinnati, O.
Aneurism of Arch of the Aorta Treated by the Simultaneous Deligation of the Right Common Carotid and Subclavian Arteries, 285.
Specimen of Appendix, 428.
Aneurism of the Aorta, Specimen, 579.
- JOHNSTON, DR. J. AMBROSE, Cincinnati, O.
Valedictory Address, 441.
- JUDKINS, DR. WM., Cincinnati, O.
A Case of Thoracic Aneurism, 427.
- KIELY, DR. WM. E., Cincinnati, O.
Valedictory Address, 321.
Perforation of Ileum, Presumably from Typhoid, 611.

- KNIGHT, DR. ARTHUR L., Madisonville, O.
Brain Tumor: Report of a Case of Psammoma of the Right Frontal Lobe, 69.
- KRAMER, DR. S. P., Cincinnati, O.
Blood-Test for Diabetes, 291.
- KROUSE, DR. L. J., Cincinnati, O.
Report of Two Cases of Sarcoma of Bladder, with Specimen, 439.
- LANDIS, DR. JOHN H., Cincinnati, O.
Paralysis of the Sphincter in the Clamp and Cautey Operation—Muscles of the Pelvic Floor, 567.
- LANGDON, DR. F. W., Cincinnati, O.
Paramyoclonus Multiplex; Recovery, 288.
Pernicious Anemia—Clinical Report, 294.
- LAYNE, DR. PORTER C., Proctorville, O.
Foreign Body in Nose; Duration Seven Months; Interesting Reflex Phenomena, 30.
- LORIMER, DR. HUGH F., Fair Haven, O.
Endorsed, 402.
The Physician in Appendicitis, 541.
- LYLE, DR. B. F., Cincinnati, O.
What Treatment Shall we Adopt for Pulmonary Tuberculosis? 127.
Tuberculosis—Specimens, 141.
- MALSARY, DR. GEO. E., Cincinnati, O.
Typhoid Fever: Practical Value of the Blood-Test, 311.
Tests for the Blood and Urine in Diabetes, 453.
- MARKMILLER, DR. H. G., Newport, Ky.
Local Poisoning from Paris Green, 653.
- MCLEISH, DR. JOHN LEWIN, Cincinnati, O.
Treatment of Urethritis, Acute and Chronic, 234.
- MCMECHAN, DR. J. C., Cincinnati, O.
The Indian Girl's Skeleton, 231.
- MILLIKIN, DR. DAN, Hamilton, O.
Inhibition in its Latter-Day Aspects, 47.
- MINOR, DR. THOMAS C., Cincinnati, O.
Treatment of Dyspepsia by Massage, 19.
Parisian Medical Chit-Chat, 43, 59, 225, 251, 282, 394, 444, 507, 584, 640.
Notes from the History of Medicine, 90, 122, 146, 163, 305, 328, 354, 377.
Military Surgeons, 563.
- MITCHELL, DR. GILES S., Cincinnati, O.
Uterine Fibroid, 89.
- MOLONY, DR. LOUIS A., Cincinnati, O.
Ichthyosis, 335.
- MONROE, DR. GEO. J., Louisville, Ky.
Syphilis of the Rectum, 32.
Pure Air, 72.
Treatment of Rectal Diseases, 159.
Advertising, 387.
Sleep, 389.
The Free Dispensary Abuse, 402.
Rectal Diseases, 546.
- MUELLER, DR. VICTOR F., Milwaukee, Wis.
What Influence has Intensely Dry Hot Air on Painful and Inflamed Joints? 548.
- MUMAUGH, DR. SHELBY, Lima, O.
Cremation, 23.
- NORTON, DR. OLIVER D., U. S. N.
Beri-Beri, 359.
- OLIVER, DR. J. C., Cincinnati, O.
Sarcoma of Testicle, 292.
- Painful Stump Due to Incarcerated Ulnar Nerve, 405.
Carcinoma of the Cecum; Cecectomy; Murphy Button Anastomosis; Recovery, 406.
Gun-Shot Wounds of the Abdomen, with Report of Fifty-eight Cases, 463.
- PALMER, DR. C. D., Cincinnati, O.
Some Sequelæ of Abdominal Sections, 418.
- PORTER, DR. WM. D., Cincinnati, O.
Appendicitis in Children, 105.
Prophylaxis of Puerperal Sepsis, 415.
- PRIOR, DR. AMELIA J., Xenia, O.
The Management of Pregnancy and Labor, 523.
- RANSOHOFF, DR. JOSEPH, Cincinnati, O.
Considerations on the Diagnosis and Operative Treatment of Gall-Stones, 95.
Intra-ligamentous Fibroid, 607.
Lympho-Sarcoma of the Neck, 608.
- RAVITCH, DR. M. L., Lexington, Ky.
Chancroids or Soft Chancres, 345.
- REAMY, DR. THAD. A., Cincinnati, O.
Decidual Retention Complicating Pregnancy, 89.
Case Report, 266.
- RICKETTS, DR. B. MERRILL, Cincinnati, O.
Appendicitis, 86.
Case Reports and Specimens, 427.
Formalin, 454.
Prostate Hypertrophy; Emasculation; Nine Cases, 481.
Deaths (Ten), Surgical and Causes, 571.
Chronic Adenitis of the Neck, 579.
Typhoid Perforation, 604.
- RICKETTS, DR. EDWIN, Cincinnati, O.
Vaginal Hysterectomy for Infantile Uterus, 267.
Cystic Floating Kidney, 291.
Obstruction of the Common Duct of the Gall-Bladder, 452.
Abscess of Uterus in Puerperal Septicemia, 460.
Pessary Worn for Nineteen Years, 629.
- ROWE, DR. JAMES W., Cincinnati, O.
Icterus Neonatorum, 619.
- RUMBOLD, DR. THOS. F., St. Louis, Mo.
Otomasthenia—Muscle-Deafness, 28.
- SATTLER, DR. ROBERT, Cincinnati, O.
Surgery in Obstinate Neuralgia of the Mastoid Region, 420.
Care of the Eyes of Infants At or Immediately After Birth, 557.
- SCHENCK, DR. W. EDWARDS, Cincinnati, O.
Pernicious Anemia—Blood Specimen, 293.
- SCHOOLFIELD, DR. C. B., Dayton Ky.
Ectopic Pregnancy Twice in the Same Patient, Report of Three Cases, 184.
- SCHWAB, DR. LOUIS, Cincinnati, O.
Inaugural Address of the President, 319.
- SCOVILLE, DR. S. S., Lebanon, O.
The Bradley Case, 115.
- SMILEY, DR. CHAS. W., Washington, D.C.
The Free Hospital—An Instance, 171.
- SPIERS, DR. H. H., Ravenna, O.
Tuberculosis: A Catechism, 75.
Tuberculosis, 370.
Tuberculosis: Food Product, 576.

- | | |
|--|--|
| <p>STRICKER, DR. LOUIS, Cincinnati, O.
Operation for Mastoid Disease, 606.</p> <p>TANGEMAN, DR. C. W., Cincinnati, O.
Anatomy of the Bony Orbit, 364.</p> <p>TATE, DR. MAGNUS A., Cincinnati, O.
Puerperal Eclampsia, 86.
Puerperal Gangrene, 502.</p> <p>THOMPSON, DR. J. A., Cincinnati, O.
Acute Purulent Otitis Media; Mastoiditis; Pyemia; Death, 406.
Fibro-Sarcoma of the Nose, 82.</p> <p>THORNER, DR. MAX, Cincinnati, O.
Ingestion of Foreign Bodies, 85.
Intubation with Improved Instruments, 187.</p> <p>TWITCHELL, DR. G. B., Cincinnati, O.
Bronchial Cast; Fibrinous Bronchitis, 85.
Diphtheria and Diphtheria, 207.</p> | <p>VON RUCK, DR. KARL, Asheville, N.C.
The Treatment of Pulmonary Tuberculosis with Remedies Derived from the Specific Germ, 135.</p> <p>WEAVER, DR. WALTER B., Cincinnati, O.
The Electric Light in Genito-Urinary Diseases, 255.</p> <p>WITHROW, DR. J. M., Cincinnati, O.
Cincinnati's Consumption Mortality, 224.
Dermoid Cyst, 406.
Fifty Cases of Abdominal Section without a Death, 595.</p> <p>WRIGHT, DR. F. C., Columbus, O.
A Specific for Puerperal Eclampsia, 53.</p> <p>ZELLER, DR. B. F., Christiansburg, O.,
Diphtheria and Tuberculosis, 327.</p> <p>ZENNER, DR. PHILIP, Cincinnati, O.
Psychic Treatment of Disease, 493.
Neurasthenia, 643.</p> |
|--|--|

INDEX TO VOLUME XL.

JANUARY-JUNE, 1898.

- | | |
|--|--|
| <p>ABDOMINAL abscess, 457.
incisions, some considerations of abdominal, 334.
section, fifty cases without a death, 600, 610.
sections, some sequelæ of, 418, 429.</p> <p>Abscess of the uterus in puerperal septicemia, 460.</p> <p>Academy of Medicine of Cincinnati, 274.</p> <p>Acne, 605.
rosacea treated by intra-dermal injections of formaldehyde, 332.
turpentine in the treatment of, 432.</p> <p>Adhesion of the female prepuce, 422.</p> <p>Advertising, 387.</p> <p>Aged parents, 179.</p> <p>Alexander operation, the, 527.</p> <p>Amblyopia, transient, 1, 15.</p> <p>American Academy of Medicine, 192.
destiny, 528.
Medical Association, 326.</p> <p>Anemia, a unique case of, 120.
significance of chlorides in, 284.</p> <p>Anesthetic, a new local, 180, 205.</p> <p>Aneurism, a case of thoracic, 427.
of arch of the aorta treated by the simultaneous deligation of the right common carotid and subclavian arteries, 285.
of the aorta—specimen, 579.</p> <p>Angina pectoris and its relation to dilatation of the heart, 397.</p> <p>Aortic regurgitation, varieties of, 351.</p> | <p>Apostrophe to the dollar, 438.</p> <p>Appeal, an, 64.</p> <p>Appendicitis, 86.
at the age of seventy-two, 290.
in children, 105, 112.
the physician in, 541.</p> <p>Appendix, specimen of, 428.</p> <p>Arthritis deformans, lactic acid in a case of, 353.</p> <p>Association, 116.</p> <p>Ataxia, treatment of the pains of by methylene blue, 214.</p> <p>Authorship, credit for, 350.</p> <p>BALDNESS, a fictitious microbe the cause of, 515.</p> <p>Banquet of the Society of Ex-Internes of the Cincinnati Hospital, 514.</p> <p>Battery, a home-made, 554.</p> <p>Bedbugs, a remedy for, 653.</p> <p>Beri-beri, 359.</p> <p>Best place for the sick, 398.</p> <p>BIBLIOGRAPHY:
Aids to Aseptic Technique, Whitting, 310.
A Laboratory Text-Book of Pathology, Whitacre, 67.
American Text-Book of Genito-Urinary Diseases, Syphilis, and Diseases of the Skin, Bangs and Hardaway, 492.
American Year-Book of Medicine and Surgery, Gould, 334.
Annual Report of the New York State Commission in Lunacy, 230.</p> |
|--|--|

BIBLIOGRAPHY:

- A System of Medicine, Allbutt, 228.
 Bulletin of the Ohio Hospital for Epileptics, 332.
 Clinical Text-Book on Surgical Diagnosis and Treatment, Macdonald, 230.
 Compendium of Insanity, Chapin, 462.
 Conversations on Animal Life, Howe, 229.
 Diseases of the Stomach, Hemmeter, 230.
 Diseases of Women, Herman, 333.
 Hartley-Auvard System of Obstetrics, Hartley, 665.
 Essentials of Bacteriology, Potter, 461.
 International Medical Annual and Practitioner's Index, 414.
 Lectures on the Action of Medicine, Brunton, 309.
 Medical and Surgical Report of the Presbyterian Hospital in the City of New York, 180, 666.
 Nettleship on the Eye, 46.
 Orthopedic Surgery, Moore, 333.
 Outlines of Rural Hygiene, Bashore, 149.
 Pathological Technique, Mallory and Wright, 253.
 Proceedings of the Military Surgeons of the United States, 180.
 Skin Diseases of Children, Fox, 68.
 Surgical Complications and Sequels of Typhoid Fever, Keen, 333.
 Text-Book on Surgery, General, Operative and Mechanical, Wyeth, 332.
 The Aphasias and Their Medico-Legal Relations, Langdon, 149.
 The Doctor's Window, Warren, 229.
 Transactions of the College of Physicians of Philadelphia, 334.
 Transactions of the Ohio State Medical Society, 414.
 Treatise on the Diseases of Women, Skene, 334.
 Twentieth Century Practice, Stedman, 333.
 Billious headaches, 189.
 Blepharitis, 353.
 Board of Affairs, the, 588.
 Bony orbit, anatomy of the, 364.
 Bradley case, the, 115.
 Brain tumor: report of a case of psammoma of the right frontal lobe, 69.
 Bronchial cast; fibrinous bronchitis, 85.
 Bust developer, dangers of the, 90.
- CANCER**, the transmission and dissemination of, 244.
 of the breast, 10, 377.
 of the tongue, what operation can do for, 412.
 Carcinoma, injections of alcohol in, 108.
 of the cecum; cecectomy; Murphy button anastomosis; recovery, 406.
 of liver and omentum, 290.
 Cardiac affections dependent upon arteriosclerosis, treatment of, 249.
 disease, the prognosis in, 562.
 Care of cows for a production of a suitable food for infants, 487.
 Case reports, 266.
 and specimens, 427.
 Casts and albumen, significance of, 422.
 Cervical adenitis, 462.
 Chancroids or soft chancre, 345.
 Cheyne-Stokes respiration, new theory of, 119.
 Children's appetites, 452.
 friends, the, 616.
 Chloro-anemia in boys, 41.
 Chronic adenitis of the neck, 579.
 gonorrheal vaginitis and its treatment, 560.
 Cigarette question, the, 347.
 Cincinnati College of Medicine and Surgery, commencement exercises of the, 401.
 Hospital, the, 191, 223, 239, 297, 326, 534, 589, 637.
 Cincinnati's consumption mortality, 224.
 Coffee as a restorative medicine, 665.
 Colitis, one of the evils of incomplete, 584.
 Cold, for, 427.
 Comparison, a, 590.
 Compression of carotids, how it may be utilized in surgery to effect anesthesia, 347.
 Consideration, a, 278.
 Constipation, creosote in chronic, 228.
 and renal phenomena, 561.
 Contusions, menthol collodion for, 653.
 Convulsions, etiology of infantile, 40.
 Coughs in children, 303.
 Cremation, 23.
 Cross-saddle riding for women, 72.
 Cystic floating kidney, 291.
 Cysticercus of the skin in a ten-year-old girl, 575.
- DEAFNESS**, treatment of chronic by thyroidine, 40.
 Deaths (ten), surgical and causes, 571.
 Demonstration of changes in nerve cells after febrile high temperatures, 245.
 Denver meeting, the, 424.
 Dermoid cyst, 406.
 Diabetes, blood-test for, 291.
 the diagnostic value of the aniline dyes, 517.
 tests for the blood and urine in, 453.
 Diabetic albuminuria and its treatment, 539.
 Diagnosis of renal permeability by the use of methylene blue, 118.
 Diet of prospective mothers, 250.
 Diphtheria, 212.
 and diphtheria, 207, 215.
 for what period of time can immunity be conferred by a single injection of antitoxine?—the dosage, 5.
 tracheotomy in, 455.
 and tuberculosis, 327.
 and tuberculosis maps, 383.
 Discussion, a, 323.
 Dispensaries, some more facts in regard to, 179.
 Dispensary abuse, the, 193.
 District physicians, 614.
 Dyspepsia, treatment of by massage, 19.
- ECLAMPSIA**, elimination of toxins in, 243.
 Ectopic pregnancy twice in the same patient, report of three cases, 184, 195.
 Eczema, treatment of, 42.
 picric acid a valuable remedy for, 624.
 treatment of by picric acid, 516.
 Eiselein vs. Palmer, 192.
 Emphysema and chronic bronchitis, strychnine in, 420.

Endorsed, 402.
 Epilepsy, contribution to our knowledge of the pathology of, 262.
 general conclusions regarding, 204.
 Epistaxis, 58.
 Erysipelas, for, 554.
 Exalgine, 246.
 Expectoration heart, the, 241.
 Extra-uterine pregnancy, 625.
 Eyes of infants, care of at or immediately after birth, 557.

 FEVER and high pulse in infants, 32.
 Fibroid tumors of the uterus, carcinomatous degeneration of, 347.
 uterus with attached appendages, 200.
 Fibro-sarcoma of the nose, 82.
 Fistula, operation for, 149.
 Floods, the, 348.
 Foreign bodies, ingestion of, 85.
 swallowed, 85.
 in nose; duration seven months; interesting reflex phenomena, 30.
 Formalin, 454.
 Fort Thomas, 530.
 Fractures, treatment of, 302.
 of the patella, treatment of with glue splint, 551.
 Free dispensary abuse, the, 402.
 hospital—an instance, 171.

 GALL-BLADDER, congenital absence of, 290.
 obstruction of the common duct of the, 452.
 primary cancer of, 290.
 Gall-stones, 200.
 considerations on the diagnosis and operative treatment of, 95.
 Gastritis, chronic, 663.
 Gastro-intestinal diseases, ichthyol in, 135.
 Genital malformation, an unusual case of, 617.
 Genito-urinary diseases, the electric light in, 255, 263.
 German measles (rötheln), diagnosis of, 606.
 Germs, the longevity of in dust, 68.
 Gland tuberculosis, treatment of the pre-tuberculous condition in, 411.
 Gold-cure asylums, 382.
 Gonococcus, how to find the, 563.
 Gonorrhea as a cause of pelvic disease, 506.
 hydrozone and glycozone in the treatment of, 178.
 in married women, 39.
 of the rectum, 594.
 prevention of, 563.
 treatment of, 594.
 Grand Army of the Republic, thirty-second national encampment of the, 385.
 Granular conjunctivitis, hygiene of; with special reference to the United States military service, 621, 632.
 Grippe, effects of on the female genital organs, 251.
 Gualacol, 186, 392.
 as a local anesthetic, 300.
 Gun-shot wounds of the abdomen, with report of fifty-eight cases, 463, 482.

 HARELIP, medical and surgical treatment of, 510.

Hatfield, Dr. Marietta, 515.
 Headache, treatment of, 64.
 Health department, 448.
 Heart disease, caffeine in, 288.
 epilepsy and the epilepsy of arterio-sclerosis, 300.
 Hematemesis, 249.
 Hemorrhage in neurasthenia, 352.
 Hemostatic, a new, 19.
 Hernia of the pregnant womb, 403.
 Herpes zoster, 46.
 High altitudes, advantages of, 501.
 Higher education in medicine, 60.
 History of Medicine, notes from the, 90, 122, 146, 163, 305, 328, 354, 377.
 Hospital drummer, a, 324.
 enterprise, 353.
 establishment, a, 79.
 Hotel accommodations at Denver, 278.
 How people sleep, 451.
 Human neurogila, a contribution to the study of, 302.
 "Hydrophobia," 323.

 ICHTHYOL in the treatment of affections of the respiratory organs, 38.
 Ichthyosis, 335.
 Icterus neonatorum, 619, 631.
 Inaugural address, 319.
 Indian girl's skeleton, the, 231.
 Indiana State Medical Society, 298.
 Infantile stools, 540.
 Infants, overfeeding of, 244.
 Infective diseases, the influence of fever and leucocytosis upon the course of, 66.
 Influenza, 78.
 cerebral infection with the bacillus of, 280.
 in children, 247.
 Information wanted, 14.
 Inhibition in its latter-day aspects, 47, 54.
 Insolation, 634.
 Intra-ligamentous cyst, 289.
 fibroid, 607.
 ovarian tumor, 141.
 Intubation: report of two cases, 549.
 with improved instruments, 187.
 Intussusception, treatment of acute, 65.
 Iodism producing cerebral compression, a remarkable case of, 189.
 Itch, to cure in two hours, 63.

 KENTUCKY State Medical Society, 277, 531.
 Kelsey, Dr. Charles B., 276.

 LANOLIN, advantages of as an ointment base, 303.
 Laudable, 533.
 Law, an influence of the, 172.
 Localized collective investigation, 661.
 Lock-ward and inmates, 13.
 Locomotor ataxia, exercise treatment of, 246.
 Lymphatic puerperal sepsis, 300.
 Lympho-sarcoma of the neck, 608.

 "MAIDEN," legal definition of, 618.
 Malaria, nuclein in, 446.
 precautions against, 661.
 Malarial fever, nature of the flagellate forms of the parasite of, 281.

- Mammon in the church, 637.
 Marriage laws, 173.
 and lunacy, 323.
 Mastoid disease, acute—result of erysipelas, 87.
 operation for, 606.
 McDowell Medical Society, 556.
 Meanest of sins—Ingratitude, 587.
 Medical college classes, 399.
 college commencements, 490.
 College of Ohio, 592.
 department, U. S. A., 513.
 men in the army, 489.
 popes, 205.
 profession, a hospital bidding against the, 394.
 societies, 296.
 society homes, 425.
 war measures, 510.
 Mental side of the sense of hearing, 358.
 Michael Angelo and his prescriptions, 22.
 Migraine, for the relief of, 394.
 Military surgeons, 563.
 Mosquito: a nuisance easily abated, 413.
 Mother's milk in the colostrum period, 571.
 Muco-solvent, 145.
 Multilobular fibroid tumor, 373.
- NASAL** secretion in adult life, irritating effect of, 351.
 Nephrectomy, rest in, 653.
 Nephritis, 292.
 Nerve training, 492.
 Neurasthenia, 643, 657.
 observations upon the treatment of some cases of, 559.
 Neuron theory, the, 616.
 Not very ancient history, 590.
 Note on the poisonous action of creosote and gualacol as compared with creosotal and gualacol carbonate, 592.
 New York Hospital, the, 401.
 Skin and Cancer Hospital, 301.
- OBESITY**, Apenta water in the treatment of, 190.
 treatment of, 618.
- OBITUARY:**
 J. W. Hamilton, M.D., 63.
 Samuel R. Evans, M.D., 81.
 Dr. Zacharin, 121.
 Joseph O'Dwyer, M.D., 121.
 Hart, Mr. Ernest, 122.
 Theophilus Parvin, M.D., 144.
 Wm. H. Bunker, M.D., 278, 299.
 Obstetrics versus gynecology, 265.
 Ohio medical law, the, 79, 386.
 registration law works, 277.
 State Medical Society, 241, 275, 450, 535.
 Ophthalmia neonatorum, an interesting case of, 614.
 the hygiene of, 595.
 Orthopedic practice, errors of diagnosis in, 664.
 Ossification of the choroid, 181, 203.
 Otitis media, acute, 604.
 acute purulent; mastoiditis; pyemia; death, 406.
 Other occupations, 33.
 Otomyasthenia—muscle-deafness, 28.
- PAINFUL** peritoneal adhesions, 538.
 stump, due to incarcerated ulnar nerve, 405.
 Paralysis of the sphincter in the clamp and cauter operation—muscles of the pelvic floor, 567, 580.
 Paramyoclonus multiplex; recovery, 288.
 Paris green, local poisoning from, 653.
 Parisian medical chit-chat, 43, 59, 225, 251, 282, 394, 444, 507, 584, 640.
 Paternal government, 34.
 Paupers, fees for attending, 327.
 Pelvic abnormalities, discussion on some, 372.
 Perforation of ileum, presumably from typhoid, 611.
 Pericardial effusion, proper cardiac stimulants in the presence of, 111.
 Pericarditis, operative treatment of, 253.
 Pernicious anemia—blood-specimen, 293.
 clinical report, 294.
 Peronin, 41.
 Perspiration-neurasthenia, 9.
 Pessary worn for nineteen years, 629.
 Phthisis, ichthyol in pulmonary, 204.
 Pint of saline solution hourly, 234.
 Plague and yellow, fever, 654.
 Pneumonia, strapping the chest in, 37.
 Politzer's bag, how to use, 76.
 Possible and probable, the, 10.
 Post-partum eventration, 186.
 Pott's disease, innovations in the treatment of, 151, 168.
 Practical question, a, 449.
 Pregnancy and labor, the management of, 523.
 decidual retention complicating, 89.
 Prevention of conception by division of the tubes, 363.
 Prognosis, the doctrine of averages in, 245.
 Prophylaxis, 61.
 Prostate hypertrophy; emasculation; nine cases, 481.
 Pruritus vulva, cure of by operation, 481.
 Psychic treatment of disease, 493.
 Puerperal eclampsia, 86.
 a specific for, 53.
 the causes of, 90.
 gangrene, 502, 505.
 sepsis, prophylaxis of, 415, 432.
 Pulmonary tuberculosis treated by ichthyol, 254.
 Pure air, 72.
 Puzzled doctors, 144.
 Pyosalpinx, 292.
- QUININE** in India, 345.
- RECTAL** diseases, 546.
 Relation between the nose and the sexual apparatus, 397.
 Resection of tuberculous head of femur, 84.
 of the urethra, indications for, 642.
 Right or wrong—which? 384.
 Roentgen rays and bismuth capsules in the diagnosis of pyloric or intestinal obstruction, 634.
 application of in the case of a child who had swallowed a pin, 593.
 in diagnosing arterio-sclerosis, 353.
 "Romance of a handsome couple," 326.
 Rush monument fund, 326, 386, 425.

SALICYLATE of soda incompatible with certain acids, 304.
 "Salt habit," the, 302.
 Same as here, 11.
 Sarcoma and erysipelas toxins, 9.
 of bladder, report of two cases of, 439.
 of testicle, 292.
 Scarlet fever, turpentine in, 281.
 Sclatica treated by compression over painful areas, 443.
 Science, the perils of, 68.
 Shock, 334.
 Simples, 553.
 Sir Christopher Heath's great compliment to Professor John B. Murphy, of Chicago, 540.
 Slaughter-houses, regulation of, 38.
 Sleep, 389.
 and sleeplessness, 248.
 Some simples, 655.
 startling figures, 143.
 Sophistry, 240.
 Spasmodic wry-neck, 39.
 Sprains of joints, 539.
 Staining method for sections of the skin, a new, 413.
 State and local boards of health of Ohio, 36.
 and provincial boards of health of North America, 555.
 Steam, the use of in removing tumors from parenchymatous organs, 65.
 Strabismus, the non-operative treatment of, 6, 15.
 Strontium and its salts, 109.
 Superintendent's service, the, 13.
 Suppression of urine after surgical operations, saline infusion in cases of, 37.
 Suppurating ovarian tumor, 235.
 Surgery in obstinate neuralgia of the mastoid region, 420.
 Swill milk, 325.
 Syphilis of the rectum, 32.

TELEPHONE, the, 175.
 charges in the District of Columbia, 388.
 The poor, 295.
 Thyroid gland, the, 310.
 Tickling rewards, 348.
 To be or not to be, 77.
 Tollen, 10.
 Tonic, a, 221.
 Torpidity of the bowels, 453.
 Trauma and carcinoma, 203.
 Truth, 12.
 Tubal pregnancy, ruptured, 289.
 Tubercular peritonitis, 41.
 value of laparotomy in the treatment of, 579.
 Tuberculin in dermatology, 66.

Tuberculosis, 190, 370.
 a catechism, 75.
 food product, 576.
 iodide of potassium as a diagnostic agent for pulmonary, 501.
 of the rectum, primary, 211.
 specimens, 141.
 treatment of by the salts of the blood, 27.
 thymol in the treatment of the fever of, 67.
 treatment of pulmonary with remedies derived from the specific germ, 135.
 which treatment shall we adopt for pulmonary? 127, 142.
 Tubo-ovarian cyst, 289.
 Turpentine as a remedial agent, 121.
 Typhoid fever, has the use of intestinal antiseptics a rational physiological basis in? 605.
 a note on calomel in the treatment of, 650.
 practical value of the blood-test, 311.

ULCER of the duodenum—specimen, 580.
 of the stomach, 288.
 Umbilical cord, treatment of the, 74.
 Unnecessary noises, 555.
 Urethral stricture, 193.
 Urethritis, treatment of acute and chronic, 234.
 Uterine fibroid, 89.
 Uterus, lactation atrophy of the, 82.

VAGINAL hysterectomy for infantile uterus, 267.
 Valedictory address, 321, 441.
 Varicocele, the significance of, 177.
 Vertigo known as Meniere's disease, treatment of, 140.
 Vesico-vaginal fistulae, prevention of, 235.
 Vision of recruits, 491.

WANTED—a new name for a new form of insanity, 233.
 War, the, 222, 422, 588, 635.
 Wealthy physicians, 265.
 Western Ophthalmologic and Otolaryngologic Association, 490.
 What influence has intensely dry hot air on painful and inflamed joints? 548.
 Widal's serum test, a simplification of, 220.
 Wine trade, a profitable, 246.
 Wounds, dressing of suppurating with sodium bicarbonate, 381.
 influence of diet on the healing of, 308.

 X, Y, Z-rays, 538.

YELLOW oxide of mercury, avoiding a lumpy ointment of, 304.

 ZOO, the, 552.

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Original Articles.

TRANSIENT AMBLYOPIA.¹

BY TH. A. CHRISTEN, M.D.,
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Transient amblyopia is also known as *ophthalmic hemicrania*, *migraine ophthalmique*, *scintillant scotoma*, *amaurosis partialis fugax* (Foerster). It is especially this latter designation which characterizes the array of symptoms the nature and origin of which I propose to discuss this evening.

The first principal symptom is a homonymous hemianopsic defect of the field of vision appearing suddenly and disappearing again after the elapse of a certain time. This defect of vision produces at no time a sensation of darkness. It is a defect without any and all optic sensation; hence this scotoma does not present itself to the patient as "a something black," but simply as an absence of sensation, "a nothing" (negative scotoma). It is this later characteristic of scotoma to which I wish to more especially call your attention. It is essential that the colorless defect is present homonymously and as a hemianopsia—that is, that it is distinctly noticeable in connection with the vision of both eyes; that is to say, that either the right or the left half of the binocular field of vision becomes invisible (Fig. 1), or, as Wallaston, in his famous essay on "Semi-Decussation of the Optic Nerves," expresses himself when he suffered from left-sided transient hemiopia and attempted to read the name of "Johnson" over a

door, that he was only able to decipher the "—son."

The second principal symptom is scintillation, or a sensation of tremor seen in hot air, which begins at the point of fixation and gradually extends towards the periphery of the affected part of the field of vision. Most of the time the scotoma develops itself together with the scintillation, that is also from the centre towards the periphery of the affected half.

These two first symptoms ordinarily are designated as "*scintillant scotoma*."

The third principal symptom is cephalalgia, resembling a hemicrania and invariably manifesting itself on the side of the head *opposite* the affected half of the field of vision.

These three principal symptoms are essential for the diagnosis ophthalmic hemicrania. It is admitted, of course, that the one or the other symptom in a given case may be present in a very slight degree (*formes frustes*).

As symptoms of less importance we might mention:

1. The sensation of color or light effects in zig-zag form, so-called "teichopsia."

2. Emesis, usually followed by relief.

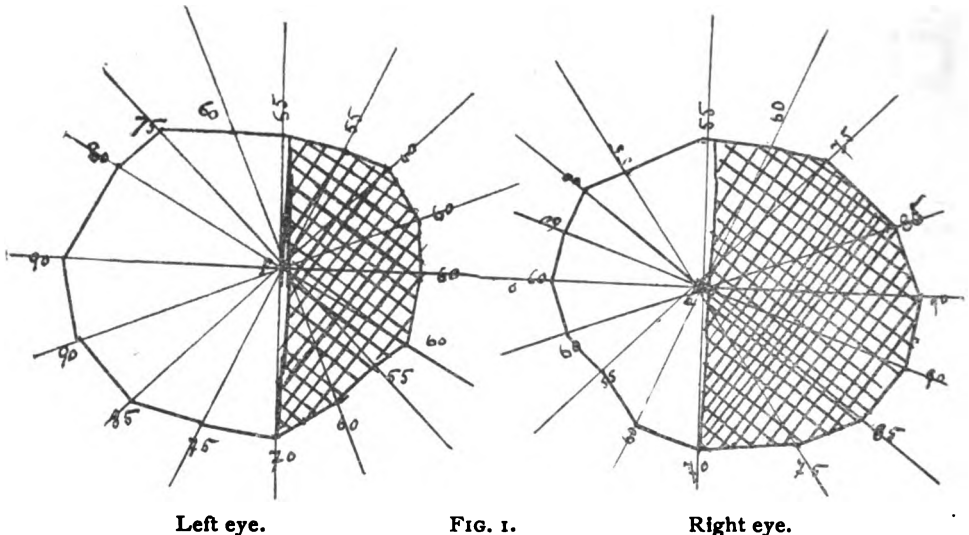
3. Severe cerebral symptoms, as sensation of numbness, paresthesia of arms and legs, nose or mouth, always on the corresponding side; even epileptiform attacks, vertigo and disturbances of hearing; *aphasia* only when the defect of the field of vision involves the *right* and the subsequent hemicrania the *left side*.

These severe sequelæ are designated by the school of Charcot as "*migraine ophthalmique accompagnée*."

I beg to now present a characteristic clinical history:

Fred. Sch., aged twenty-one, a

¹ Read before the Academy of Medicine of Cincinnati, November 15, 1897.



Left eye. FIG. 1. Right eye.
The two fields of vision in a case of right-sided homonymous hemianopsia.
The scotoma is black. F, centre of fixation.

native of Germany, came to my office May 12, 1897. Previous to his coming to this country, six years ago, he was entirely well. Soon after his immigration, however, he began to suffer from digestive disorders, especially chronic obstipation. Six months later he had a severe attack of ophthalmic hemicrania. The attacks recurred at irregular intervals. At times he had two every week, at other times he had an attack only every four to eight weeks. Whenever his constipation troubled him his attacks became more frequent and more severe. They usually began with subjective phenomena of light. The patient imagined that the objects began to move before his eyes; the motion became more rapid, the air around them began to tremble. After a few minutes these symptoms disappeared. The patient began to notice that he only saw half of the objects—*i.e.*, one-half of a face. By closing one eye the patient convinced himself that the condition of half-vision was present in both of his eyes. It was not always the same half of the field of vision that was invisible; at times it was the right, at times the left half. If it was the left side of the object that was invisible he was sure to suffer severe hemicrania of the right side of his head, and *vice*

versa. The hemicrania was followed after half an hour or so by severe vomiting. After this the patient usually felt weak. After an hour normal conditions supervened. The last attack the patient suffered five days previous to his coming to my office. Six weeks previously the patient had been successfully operated upon for appendicitis by Dr. R. C. Hill.

Patient has a weak constitution, and is easily irritated. Ophthalmic examination shows a slight hyperemia of the disc. Vision in both eyes under the influence of homatropine = 1 with + 0.25 spherical combined with + 0.25 cyl. Axis 180° (horizontal). He has a slight compound hypermetropic perverted astigmatism. Muscular equilibrium undisturbed.

In view of the prodromal appearance of indisposition patient was directed to take one or two doses of acetanilid 4 grs., and caffeine $\frac{1}{2}$ gr. In addition to *correcting his error of refraction*, patient was ordered to strictly follow the directions which his physician, Dr. Hill, had given him for the regulation of his stool. For months following patient had no attacks, so that he was considered entirely well.

We may presume that migraine ophthalmique is in reality a *vaso-motor disturbance*; considering the sudden

appearance of the symptoms, the short duration and the equally prompt disappearance, we might conceive them to be due to a vaso-motor paralysis or vaso-motor spasm of short duration affecting some part of the apparatus of optic conduction, or of the optic centres, just as we attribute the analogous hemicrania to vaso-motor disturbances. As a proof therefor we might mention the ophthalmoscopic conditions found and reported by various authors, *f.i.*, A. Siegrist¹. In those cases there was observed a spasm of the retinal arteries of that eye alone, which corresponded to that side of the head where the hemicrania made itself felt afterwards. These ophthalmoscopic findings presented contracted arteries. The conclusion is that the vaso-motor disturbance in these cases was in reality an anemia. Since, as we shall see later on, the retina cannot be considered the seat of the scotoma, we must look upon this contraction of the retinal vessels not as a local retinal symptom, but as a symptom of anemia of one cerebral hemisphere, the anemia being communicated to the retinal vessels and becoming visible in them.

This spasm is evidently due to an irritation of the sympathetic nerves in the corresponding side of the neck (DuBois Reymond).⁴ This condition of vaso-motor disturbance may present different degrees of severity, causing in severe cases aphasia, alexia, amnesia, paresthesia, hemiplegia, and even epileptiform attacks, which, of course, suggest coincident involvement of other parts of the brain besides the visual centres, especially of the sensory and motor regions of the cortex.

Where is the true seat of those vaso-motor disturbances? In solving this question we must remember that this affection is composed of two distinct sets of symptoms.

First, we have the hemicrania itself. It cannot have its origin in the substance of the brain, but only in the dura mater. As a rule, the dura mater is looked upon as the seat of hemicrania.

Secondly, the scotoma itself, which may have its origin in any part of the optic tract, including its cortical termination. Every part of the latter has

been claimed as its seat, to-wit, the retina, the optic nerve, the chiasma, the optic tract, the cerebral ganglia, the cortex—especially the occipital cortex^{5,6} (Fig. 2).

The retina and the optic nerve cannot be the seat of the affection. While it is true that different lesions of the choroid and retina (detachment of the retina, chorio-retinitis, choroiditis disseminata) and the optic nerve (especially accompanying interstitial nephritis with compression of the nerve fibres) may produce subjective phenomena of light and scotoma, which involve a larger or smaller part of the field of vision. But these disturbances of vision and the scotoma following them do not manifest themselves in both eyes by such marked homonymous hemianopsia. In addition to this, the character of the retinal and choroidal scotoma is not negative, but positive. We would have to prove that these symptoms cannot be produced by any other portion of the optic tract. This is not only not the case, but it has been shown that the irritation of the occipital cortex can produce such phenomena (Gowers).⁷

An affection in the *chiasma* where the optic nerve fibres cross cannot produce an homonymous, but only a heteronymous, hemianoptic scotoma.

A localization in the *optic tracts* could explain the homonymous form of the scotoma, but different facts speak against it:

1. Not the nerves of conduction, but their terminations, are most easily irritated.

2. We could hardly conceive an anemia or hyperemia in so small a territory as an optic tract, much less explain the connection between a circulatory disturbance in such a limited area with hemicrania.

The following case reported by Nuel⁸ (de Wecker and Landolt) may be quoted:

"The celebrated physicist, T. Plateau, was completely blind for forty years, and, nevertheless, greatly troubled up to his death with scintillant scotoma of a typically homianopic character. The cause of this blindness was a choroiditis, and, to judge from

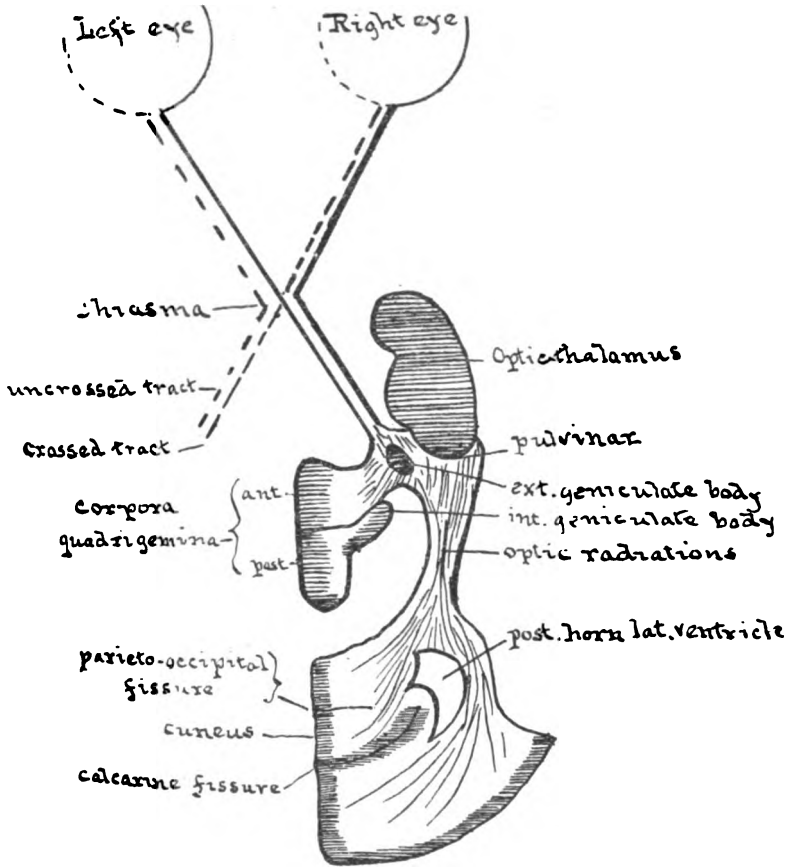


FIG. 2.—Diagram of field of vision showing course of optic fibres. From "Anatomy of the Intra-Cranial Portion of the Visual Apparatus," by Alex. Hill, in "A System of Diseases of the Eye," by Will. F. Norris and Chas. A. Oliver, Vol. I, p. 391, 1897.

investigations, we know that the optic nerves, the optic tracts, and even the mesocephalic nuclei, where the optic fibres end, the external corpora geniculata and the anterior corpora quadrigemina must have been completely atrophied."

Nothing could better illustrate the hopelessness to look for the localization of the scintillant scotoma in the already mentioned and analyzed parts of the visual apparatus of conduction.

There still remain the mid-brain ganglia, the corpora quadrigemina, pulvinar, corpus geniculatum and the occipital cortex.

The objection against the mid-brain ganglia as the seat of the affection is

that they could not be affected without the involvement of nerves of the eye-muscles, whose ganglia lie in such close proximity to the aforesaid ganglia. The fact of the reaction of the pupil from the hemianopic side having been found intact during the attack of migraine ophthalmique is another argument against the localization of the cause in the primary optic centres.

There finally remains only the cortex of the occipital lobe, and I shall try to show that the character of the cortical scotoma is a negative one, and produces the sensation of "a nothing" in contradistinction to the lesions beneath the cortex which produce a positive sensation of "black." If we intercept the

rays of light by covering the eyes with the hand we prevent the admission of an irritation of light from the outside world to the cortex; as a result of this experiment we see "black," and can say that the normal living ganglion cell of the optic nerve naturally reacts in this way. If the ganglion cells of the cortex are diseased or destroyed there is no more sensation even of darkness, and we have a negative scotoma. This is well known clinically from cases where the occipital lobe has been destroyed or injured by operation or fracture of the skull¹.

Thus we are compelled to locate the seat of the scotoma in the cortex for the following reasons:

1. The coexistence of pupillary reaction *even* from that part of the retina where there is no visual sensation.
2. The character of the scotoma itself (negative scotoma).
3. Exclusion of all the other parts of the optic tract.

ETIOLOGY.

In perusing articles or treatises about ophthalmic hemispheres it is worthy of notice that not infrequently the writer was at the same time a sufferer from scotoma. This does not mean that the disease occurs more frequently in physicians, that it attacks them in preference. It rather indicates that most sufferers, inasmuch as the condition passes off without doing harm, pay less attention to it than physicians, whose scientific interest is naturally aroused. Nevertheless, it is a fact that the disease occurs most frequently in people who strain their eyes, especially in cases where the use of the eyes is made more difficult by some existing *error of refraction*, especially hypermetropia and astigmatism. The patient whose history I spoke of, as well as all other patients whom I had seen, had astigmatism. All of them, with the exception of a single one, low degrees of it. This may have the result of fatiguing the visual apparatus more quickly and of rendering the cortical optic centre more irritable, making it more susceptible to pathological influences. Errors of refraction, however,

cannot be the only cause of the disease, because they often enough occur without ophthalmic hemispheres. Thus we must look for other causes, and we often find:

1. Inanition and hunger.
2. Disturbances of digestion and circulation.
3. Overwork.
4. Mental excitement.
5. Approach of the menses, and probably other causes which may produce an irritation of the sympathetic nervous system. Many patients are decidedly neurotics.

The disease has been known for many years, and, although we owe the knowledge of its nature and origin to the progress of anatomy and pathology, both clinical and experimental in this last quarter of the century, it is as far back as 1723 that clinical observations have been published (by de Vater and Heinicke²), and the authors of that early essay have been, as in so many instances after them, suffering from it themselves. One of the most celebrated cases was that of Wallaston, who described his case himself in 1824, and drew out of it important deductions about the semi-decussation of the optic nerves.³ Since that time the interest in the disease has been increasing, proof of which are the numerous publications in these latter days by Strehl,¹⁰ Parinaud,¹¹ Antonelli⁴ and Siegrist,⁵ whose essays I owe many suggestions, and which I have partly followed.

PROGNOSIS.

We must try to make sure whether we are dealing with a case of pure migraine ophthalmique or permanent lesions which, as a result of their localization, are capable of producing symptoms resembling those of migraine ophthalmique. The tractability of the symptoms of migraine ophthalmique depends on the nature of the predisposing causes.

THERAPY.

As far as the attacks themselves are concerned, we can try to cut them short by putting the patient in the horizontal

position, and thus equalizing the cerebral circulation.

To prevent the attacks we must treat the cause by correcting errors of refractions, by avoiding straining of the eyes and by regulating gastric and intestinal function. The general condition may call for tonics, quinine, iron, arsenic; the remedies which are used in the treatment of ordinary migraine are also indicated in the treatment of migraine ophthalmique.

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[FOR DISCUSSION SEE P. 15.]

PARVIN says that for years he has not failed to cure immediately and permanently every case of the vomiting of pregnancy by applying a sharp blister over the fourth and fifth dorsal vertebræ.

ACTEA racemosa is advised in diseases of nervous origin. A few ten-drop doses of the tincture is usually sufficient.

PALPITATION of the heart, which so frequently accompanies dyspepsia, is often calmed by tincture of valerian.

THE NON-OPERATIVE TREATMENT OF STRABISMUS CONVERGENS.¹

BY S. C. AYRES, M.D.,
CINCINNATI.

Not many years ago it was considered the proper thing to operate on nearly every case of convergent strabismus which presented itself. What the surgeon wanted and what the parents of the child wanted was some immediate and apparent result. It was usually obtained, and the parents went home pleased that the deformity of their child had been relieved, and the surgeon complacently pocketed his fee, feeling conscious that he had performed a skillful and necessary operation. But a few years later his patient was brought back with a divergence which caused a greater facial deformity than the convergence had done, and then he began to ask himself why this had come about. The operation was skillfully done and the eyes were apparently parallel for a long time, but now they diverged and the patient and his friends were more displeased than they had been pleased before.

A careful study of the influence of glasses which correct the ametropia has taught us that we accomplish much by their use, and in time correct the squint and restore parallelism to the eyes without danger of divergence. From this one might naturally presume that the strabismus depended on the ametropia, and that when this was corrected the convergence disappeared. To this we might say both yes and no; yes because the correction of the ametropia relieves the squint, and no because it is not the ametropia alone which causes it. There is something besides—a disturbance in the innervation of the ocular muscles, which is the unknown and subtle factor in the convergence. Donders attributed the squint to hypertrophic refraction of the eye, and he had a basis for this opinion, as a large majority of such cases are hyperopic. But if this was the

¹ Read before the Academy of Medicine of Cincinnati, November 15, 1897.

chief factor, why should not all hyperopes squint? Examinations of more than 150,000 cases show that only from 2 per cent. to 3 per cent. have convergent squint. I may also say that the hyperopic eye is considered the normal eye, that most infants are hyperopic. Examinations of thousands of school children's eyes show that about 50 per cent. are hyperopic, and yet only a very small per cent. squint.

What, then, may be the cause of the convergence?

Dr. Noyes, in his work on diseases of the eye, published in 1881, refers to Donders as regarding "convergent squint and hypermetropia as standing about universally for cause and effect." He says: "Large observation has modified these views, and, while we find that hyperopia acts the most important part in the production of converging squint, we have many statistics to show that essential muscular defects are also operative."

Hansen Grant, in the Transactions of the Ophthalmological Society, 1888-1889, says: "Convergent strabismus is the result of an innervation, which produces a greater shortening of the recti than is desirable. If this abnormal innervation ceases, either permanently or temporarily, the strabismus disappears."

Valude, in *Archiv d. Ophthalmologie*, vol. x, says that the explanation of Donders probably does not even fit the majority of cases, but that a neuropathic disposition is an important, sometimes the principal, factor in the development of strabismus."

The fact that strabismus disappears even without the aid of glasses seems to confirm this innervation theory. Recently a medical gentleman who had brought his little daughter for a strabismus operation told me that he was cross-eyed in childhood, and that it had disappeared. I have also records of several cases where the convergence had disappeared.

I have thought that it might interest you to hear the effects of the early adjustment of glasses in convergent strabismus, and I have collected a number of cases which have been under observation from five to ten years.

CASE I.

Female, aged seven, examined first in 1888; she then had a marked convergent strabismus. A year later I examined her again and found her eyes comfortable for study, with the correcting glasses and the squint relieved as long as she wore them. I saw her at long intervals, and always found her eyes in good condition. After wearing her glasses four or five years she took them off for a few months, and when I saw her again her eyes were as much crossed as when I first saw her. I insisted on her wearing them constantly, and she does so now, and her eyes are parallel.

CASE II.

Female, aged four and a half years, sister of above. Was brought to me soon after the strabismus showed itself. It was then only intermittent. Her H. was 4 D. I adjusted glasses. The trouble was relieved and her eyes are now free from the slightest convergence.

CASE III.

Female, aged five, examined in 1895, sister of the above. Had intermittent convergent squint. Her H. was 3 D. Glasses were adjusted and the trouble disappeared.

I mention these cases together to show that the same anomalies may run down through successive children in the same family.

CASE IV.

In 1892 I gave glasses to a little girl only two years and two months old. I doubted whether she would wear them, but, to my surprise, she took kindly to them. She had intermittent squint of only a few months' duration. The glasses relieved the photophobia and muscular spasm, which she suffered from, and the first thing she asked for in the morning was her glasses. This is quite the youngest child that I ever heard of wearing glasses, but it only shows what can be done in such cases. I saw her four years later, and her eyes were relieved by the glasses, and she

was going to school and studying without trouble.

In connection with this I may say that during the past summer I gave glasses to a little girl only three years of age. She wears them constantly, but it is too soon to determine the influence of the glasses on the convergence.

CASE V.

Male, aged twelve years; strabismus convergens, left eye; 1891. He had only a moderate degree of hyperopia (1 D) and had no asthenopic symptoms. Glasses were ordered and he has worn them ever since. He is a college student now, and his eyes are parallel as long as he wears his glasses.

CASE VI.

Male, aged ten years, was examined in 1883. He had a high degree of hyperopia in his right eye, and the left was very amblyopic and convergent. He has been examined at intervals during the past fourteen years. He wears his glasses constantly and uses his eyes with great comfort, and no convergence is apparent.

CASE VII.

Female, aged nine years, seen first in 1891. Convergence of left eye. H. 4 D; R., V=1. L., H. 4 D; V=0.1. She was examined recently and the eyes show no evidence of convergence, but the left eye still remains amblyopic.

CASE VIII.

Female, aged eight years, was examined first in 1887. Alternating strabismus with perfect vision in both eyes. She has been examined at intervals during the past ten years. She has H. 1.5 in each eye. Her eyes are straight with glasses on, but without them the squint returns at once.

CASE IX.

Female, aged nine years, seen first in 1887. Marked convergence of left eye; hyperopia 3 D of right eye. Proper correcting lenses were ordered. She has been seen occasionally for the past twelve years. Her eyes are parallel

with glasses on, but as soon as removed the convergence returns.

CASE X.

Male, aged six years, seen first in 1889. Brother of the above. He had diplopia and convergence, which were very annoying. He was seen a few weeks after these symptoms developed. His refraction was estimated and glasses given. The result was entirely satisfactory. The diplopia disappeared very promptly, and the convergence was in time fully corrected. He has no asthenopia and still wears his glasses.

CASE XI.

Male, aged seven years, marked convergence of left eye. He had only a moderate degree of hyperopia and proper glasses were given for its correction. He wore them with great comfort, and while doing so his eyes were straight. Ten years later he told me he could not see with his glasses in the distance, and I found he was correct by the test. I then allowed him to use them only for reading. A year later he said he could not read with his glasses, and this also proved to be true. Without his glasses he could see well for near and distant vision, and his convergence had entirely disappeared. He was allowed to discontinue their use entirely. He has not worn them for about five years and yet his eyes show no return of the convergence.

These are only a few of the many cases which my note-books furnish showing the gradual correction of strabismus, and in one case its entire relief. Some cases get only a moderate relief, and in others the effects of a long-continued use of glasses seem to be negative.

In the essay recently published by Dr. Edwin Houthouse he analyzes 144 cases of convergent strabismus. In more than 60 per cent. the use of glasses brought about a permanent reduction of the convergence. In 30 per cent. the squint was relieved as long as glasses were worn, and in only 8 per cent. was the use of them negative.

The treatment of convergent strabis-

mus should then be mechanical at first. The anomaly should be as fully corrected as possible, and the lenses changed when the latent hyperopia becomes manifest. Patients should be required to wear glasses constantly, not intermittingly, as some of them would do. The frames should be carefully adjusted so that the eyes will receive the greatest amount of relief.

In my judgment it is not good surgery to operate on a child with strabismus until the trial with glasses has been exhaustively made. It is far better to let the child wear glasses for several years rather than operate and have a divergence. There are exceptional cases where, in excessively high degrees of strabismus, an operation is justifiable, but these are rare. After twelve or fourteen years of age the glasses do but little good, and if they have not been of benefit before that time it is safe enough to tenotomize the internus or advance the externus. If an operation had been done on any one of the cases mentioned it is quite certain that a divergence would have resulted. The same could safely be said of the majority of all cases of convergent strabismus. The non-operative course is the safe and conservative course until the effects of lenses have been thoroughly tested.

[FOR DISCUSSION SEE P. 15.]

Perspiration-Neurasthenia.

Dr. Peyer (*Med. Times and Hosp. Gaz.*, No. 1045) reports the case of a man thirty years of age who, during the last four years, had perspired profusely in the day, and, during the last month, also in the night. So profuse was the perspiration that he was obliged to change his clothes several times during the night. He had become very emaciated. Many drugs were tried, but without any benefit. As the patient confessed to having masturbated for many years, the diagnosis of sexual neurasthenia was made. He was treated with sounds and the psychrophore, and after six weeks of this treatment the perspiration ceased and the patient was completely cured.

SARCOMA AND ERYSIPELAS TOXINES.

BY J. F. BALDWIN, M.D.,
COLUMBUS, O.

In the issue of the LANCET-CLINIC of November 27 is a most excellent article on "Sarcoma," by Dr. Whittaker, in connection with which I wish to place on record three cases of this disease treated by the erysipelas toxine.

CASE I.

Female, aged twenty-five, sarcoma of the upper jaw. Excision of the jaw was made in the usual manner, and was followed by prompt recovery. Recurrence took place within a few months, when the patient was placed upon the use of the toxines obtained from Dr. Coley. The result seemed to be entirely negative. Patient died promptly.

CASE II.

Female, aged seven, sarcoma (round-celled) of the naso-pharynx. As the tumor developed it pressed the soft palate down so as to threaten suffocation. To relieve this tracheotomy was made and a tube inserted. Coley's toxines were administered with marked constitutional effect, but no effect on the growth. The patient lived about seven months after the tracheotomy, the growth at the time of death protruding from the mouth and nostrils, producing marked exophthalmos, and encroaching on the brain.

CASE III.

Female, aged forty-eight, sarcoma (round-celled) of tonsil. Was sent to New York, where the treatment was kindly supervised by Dr. Coley himself. No effect whatever on the progress of the growth, death taking place about six months later.

In the discussion following the reading of Dr. Whittaker's paper, Dr. Dandridge spoke of a case of abdominal sarcoma operated upon by Dr. Richardson, of Boston, in which, following the exploratory incision which led to the diagnosis, the patient was treated by

Dr. Coley and recovered. The result in that case reminds me of a case which I saw in consultation a number of years ago with my friend, Dr. T. W. Jones, of this city. The pelvis and lower abdomen were filled with a growth which I unhesitatingly pronounced malignant, and advised against any operation. A few weeks later the abdomen was opened by a colleague, who, after examining the growth, pronounced it sarcomatous and closed the abdomen. Whether we were both mistaken in our diagnosis, or whether the exposure of the peritoneum affected the tumor favorably, I do not know, but I know that the growth entirely disappeared, and this, too, without the use of any anti-toxines or other treatment. The disappearance of the tumor, therefore, in Dr. Richardson's case may have been in no sense due to the use of the anti-toxines.

Cancer of the Breast.

Dr. W. L. Rodma states that the results of Keen, Bull, Dennis, Weir, Halsted, and Powers, six American surgeons, who have within the year published their statistics in operations for cancer of the breast, show a mortality of less than one per cent. (six hundred and fifty-six operations and six deaths). He concludes his paper with the following propositions:

1. All mammary growths should be removed at once, for innocent tumors, carried for a long time, become a menace.
2. The complete operation should always be done in cases of malignant disease.
3. In nearly every case it is simply impossible to detect enlarged glands until the axilla is opened. Keen says that he cannot do so once in ten times.
4. The mortality should be, with average operators, about three per cent.
5. A radical operation should promise from twenty-five to fifty per cent. of permanent cures, according to the time when patients apply.
6. When in doubt operate; never wait for symptoms. — *Charlotte Med. Journal.*

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J. C. CULBERTSON, M.D.,
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DR. J. C. CULBERTSON,
317 W. SEVENTH ST., CINCINNATI, O.

CINCINNATI, JANUARY 1, 1898.

Editorial.

TOLLED.

The tolling of the midnight bells and breaking up of watch-meetings tell of the departure of an old year and birth of a new one. The old one was not particularly historic in medicine, and yet progress was made all along the line in every department; not one fell back. The young men are at work, wresting from nature her well-guarded secrets, and no man can tell what may be developed on the morrow.

The future is bright with promise. A new year is dawning, new resolutions—and good ones, too—are being formulated, some of which will be lasting, while others, alas! will fade and disappear, as mists before the rising sun. Just all the same, the world do move.

THE POSSIBLE AND THE PROBABLE.

The following abstract tells of one and not the other:

“NEW SOURCES AND VEHICLES OF MALARIAL INFECTION.—Dr. S. Pulverenti, of Naples, announces in the *Four-*

nal of the American Medical Association that he has established the fact that malaria can be transmitted by the dust of cereals, especially wheat, and by the dust of textile plants, flax, hemp, etc., even for years after they have been macerated."

The recently discovered and now known causes of most of the infectious diseases have developed a spirit of laudable investigation which sometimes carries one into a realm of ridicule, of which the above is an illustration. The author might have gone on to say that whirlwinds and all sorts of aerial disturbances may be vehicles for a transmission of malaria. Other microscopical pathologists proclaim the possibility of infection through a handling of news and other papers, of books and clothing, all of which are no doubt possible but altogether improbable.

To carry into effect in daily life-work the problems which have been and are from time to time proposed for a possible avoidance of infectious disease germs would be to make the ordinary conditions of life simply unendurable. Fortunately for the human family, there exists in every one in normal health such resisting powers as to render them immune to the irritations which are possible from an absorption of infectious bacilli.

It may not be successfully questioned that there is a possibility of contracting malaria from the dust of cereals, and especially wheat, but in the case of the ordinary farmer or laboring man the probability is so exceedingly slight as to place such contagion beyond the pale of probability. The whirl of the improved threshing-machine, with its rattling and shaking riddles, is not likely to cease because of the discoveries of Dr. S. Pulverenti; nor will they transmit malarious rigors to the men

who manipulate them. In fact, in the greatest wheat-growing regions of the world malaria is an almost unknown disease.

It is probable that a propagation and distribution of the bacilli of nonsense will go on, and, like the poet's brook, on forever; but it is suggested that a line be drawn between the possible and improbable, that will be so distinct as to separate the one from the other nearly all of the time.

SAME AS HERE.

The *British Medical Journal* of December 18, 1897, page 1808, tells of how Mr. Ensor an ophthalmic surgeon, proceeded in a perfectly regular way and referred patients able to pay to the directors and afterwards refused to professionally treat such patients in the wards, for which he was dismissed from the service of the Infirmary at Newport, in Wales.

For scores of years it has been the custom for physicians to give their services to public charitable institutions without charge, and in course of time such positions on the so-called professional staff came to be much sought for. So eager have men become for these places that they were willing to endure ignominy, and shut their eyes to glaring faults and conditions of mal-administration and corruption. All of this has come about to the great and irreparable financial loss of general practitioners, until from far and near there are tidings of revolt.

With the New Year of 1898 new resolutions should be formulated along this line. Men who imagine they hold vested rights should be displaced, and others given a turn at the wheel. This thing of men serving in the best official hospital positions for fifteen, twenty and

thirty years is outrageously wrong. There are others as competent and well qualified as they, and this is said without disrespect to any man. But every year the medical profession is reinforced by new men, some of whom have the greatest attainable skill, but, like bound boys at the huskings, they are obliged to stand out in the cold for an indefinite time, perhaps during a score or more of years, until the ardor of youth has wasted and their opportunity for making a professional mark outside of a strictly private practice is gone never to return. Not only so, but their private practice is poached upon by the hospital and college men until the margin of professional life and daily bread has become very narrow. Vested rights must be blotted out and the men who imagine they hold them should be given to understand that there are others.

TRUTH.

Truth-telling in criticism is very much like the use of surgical instruments by an operator. The latter may be skillful in his manipulations, and possessed of a bit of hypnotic power, so that with keen-edged, well-polished tools the necessary carving may be done and the patient scarcely made aware of what has transpired. But there are operators and operators; among the latter may be found the *dernier ressort* man, who has none of the magnetic element in him, whose digits are clumsy, blades crude, and all used for general and not specific purposes.

The *dernier ressort* man is very apt to receive *dernier ressort* cases. The man of skill don't want to break a record of successful professional performances, and occasionally declines to operate. Not so with the *dernier* man; he rushes in where the angel hands of

the other fellow fear to tread. His record has been made up of hard cases interwoven with the good; sometimes he has made a mistake, but, after all, his work is open to the scrutinous gaze of the world.

What has all of this to do with truth? Nothing, except for sake of comparison, and very often this is odious. Sometimes it is odorous to tell the whole truth, and the facile dissimulator shirks from uttering expressions that might let great floods of daylight into noxious festering sores; much rather would he apply soothing poultices, made fragrant with aromatic spices mingled with oriental salaams. Unciously he rubs his hands, shakes and hopes, etc. The truth is so hidden beneath perfumed gyrations that it never gets to the point where it will do the most good.

And yet this is a character that slips and glides along through the world without displacement of any of his atoms of individuality—the envy of many and president of his set. He has his place in the world of life and fills it—yes, fills it. Do you know him? The *dernier ressort* man does his work, not always with oriental salaams—could'n't make them if he tried ever so hard; but there are some things known to him by heart—that excrescences of a malignant nature should be removed. He is not always able to discriminate between benign and malignant growths. In either case he knows enough to know that floods of sunlight are the best of all disinfectants.

Truth-telling criticism has its beneficent influence, and will prevail. Sometimes it produces costiveness, but final results are always normal and generally satisfactory. Well, what of it, even if truth is mighty and will prevail? Nothing in particular, only this: The

Ohio Legislature will convene in regular session at Columbus next Monday.

LOCK-WARD AND INMATES.

Tu whit, tu whit, tu whee, the little snow bird sings, and then as it flies away there comes back an echo—yes, just a little bit of a whispering echo—from which is picked out the scheme for filling a female venereal ward in the Cincinnati Hospital. It—that is, the scheme—was a beautiful bit of strategy, and worthy of a Major General. If known to the Secretary of War the schemer would be at once tendered a situation for life at West Point. Tu whit, tu whit, tu whee—there it goes. Kind o' hate to tell it, but then the snow-bird does say that the famous order issued to the police requiring them to make visits in houses of prostitution every week or oftener and see that all inmates were provided with a certificate of inspection signed by a physician, and that upon complaint of any man who had contracted a venereal disease, or thought he had at a given house, the place would be raided and inmates dumped in the hospital venereal ward, the latter to constitute a lock-ward, and inmates treated as prisoners, although guilty of no known crime. Tu whit, to whit, to whee—the snow-bird says that order and programme actually originated in the medical department of the Cincinnati Hospital.

An effect of the order was to corrupt the police force, and, while it lasted, which was several months, and until called down by the LANCET CLINIC, swiped up several thousands of dollars for the doctors and police who were engaged in the vile scheme. It will be remembered the police were given power to differentiate between doctors whose certificates they would recog-

nize and those under their ban. Some of the dregs of that work remain. Innocents abroad who are diffident and scary are given assurance by being shown professional certificates of purity. The ad. works—the dupes.

Patients—yes, patients, a royalty for patients—is the unseen motto of the powers that be in the Cincinnati Hospital. Pay or charity, resident or non-resident, the doors do yawn. Who gets the usufruct? Somebody, and it is worth any man's position, if he has one, to tell even to a chirruping little chick-a-dee-dee.

Tu whit, to whit, to whee—comes back on the whispers of the wind. Ah! a problem in arithmetic: If a reduction of 20 per cent. in total number of patients costs the reducer one staff position, what would a possible reduction of 30 per cent. amount to? Referred for solution to the mathematical members of the Ohio Legislature.

Where, oh! where, in the Ohio statutes is found a section which says it is a crime for a woman to have gonorrhea or syphilis, and a man be exempt?

THE SUPERINTENDENT'S SERVICE.

One would naturally suppose this service is constituted of the clerks, engineer, cooks and other employes of the hospital, but in staff parlance this is an error and away off. It is made up of pay and other select patients, ticketed to the wards by the receiving physician for professional attention by himself or a select few of the staff. A majority of the staff are not recognized in this little division of spoils, and, if they know, dare not mention it for fear of loss of position. This little perquisite is financially worth anywhere from several hundred to several thousand dollars per year, and is just so much abstracted

from the business of general practitioners of medicine who are not connected with the hospital. See?

THIERSCH's solution, so much employed in surgery now, consists of one part of salicylic acid, eight of boracic acid, and a thousand of water.

FOR neuralgia of the fifth nerve butyl-chloral is said to be superior to chloral, although as a simple hypnotic for general use it is not so efficacious.

A paper "On the Antitoxic and Bactericidal Properties of the Serum of Horses Treated with Koch's New Tuberculin T.R.," by Dr. C. Fisch, of St. Louis, whatever may be the ultimate fate of his conclusions, is just a plain record of what was evidently a series of most scientific, accurate, and entirely impartial laboratory experiments, and of the deductions of an innately scientific mind thereon.

Dr. Fisch, after a brief review of the previous work done in the field of serum therapy as applied to tuberculosis, relates his experiments in immunizing horses with Koch's Tuberculin T.R., containing as it does the entire toxic products of the tubercle bacillus. It was only natural to suppose that entire toxicity would call forth an equally complete anti-toxicity. Such Dr. Fisch's experiments would appear to prove beyond reasonable doubt to be the case. Dr. Fisch's experiments took the following direction: They showed that animals which had been for some time treated with injections of the serum of immunized horses failed to be infected by a fatal dose of tubercle virus, while other animals not so protected in all cases died of tuberculosis; that the addition of serum to the tubercle virus rendered it innocuous, as was demonstrated by the fact that it did not infect animals, while the same virus without the serum killed others in every instance; that even when injected separately, though simultaneously, in different parts of the body, the serum protected the animal against infection; and that animals which had been rendered tuberculous by inoculation with the virus were cured by administration of the serum, if the disease was not too far advanced before the treatment was begun.

One striking feature of the paper is the evidence afforded of the writer's widespread acquaintance with the entire literature of the subject.

There is, we think, ample *prima facie* evidence to justify the author's conclusions being put to a thorough trial at the hands of the profession, and even should they not fully realize all expectations at least we cannot doubt that honest work such as this will indirectly, though perhaps imperceptibly, have advanced the attack upon the stronghold of disease.

Correspondence.

INFORMATION WANTED.

PARKER FORD, PA., }
December 18, 1897. }

Editor LANCET-CLINIC:

A little more than twenty-five years ago I clipped the following from one of our local papers:

"The Cincinnati *Lancet and Observer* for August says: 'On the 21st of August Mrs. Timothy Bradlee, of Trumbull County, O., gave birth to eight children, three boys and five girls. They are all living, and are healthy but quite small. Mr. Bradlee was married six years ago to Eunice Mowry, who weighed 273 pounds on the day of her marriage. She has given birth to two pairs of twins, and now eight more, making twelve children in six years. Mrs. Bradlee was a triplet, her mother and her father both being twins, and her grandmother the mother of five pairs of twins.'"

At the time I intended to make further inquiry, but laid it aside and did not do so. As it has turned up again I thought I would make inquiry whether that was a fact, and, if so, any more recent history of the family, together with their address, would be thankfully received.

Very respectfully,

E. D. MILLER.

AN ARGUMENT.—It is the opinion of eminent gynecologists that the surgical treatment of the diseases of women has been largely overdone, and that much useless mutilation has been inflicted in cases which could have been treated more safely and effectively by local applications.

Conservatism is again becoming the watchword, and the medical profession is recognizing the fact that the knife should be resorted to only when medicinal treatment has failed. When it is considered that congestion and inflammation constitute the chief element in many genital diseases, it is easy to understand why MICAHAH'S MEDICATED UTERINE WAFERS have effected so many radical cures, and have proved so often an efficient substitute for surgical measures. These wafers exert a specific influence in relieving congestion, reducing inflammation, and re-establishing normal conditions of the affected mucous membranes. Under their influence, pain and other discomforts are alleviated, discharge caused to disappear, and exudates absorbed. They act safely, efficiently and agreeably in all cases where an antiseptic, astringent, and general tonic and alterative action upon the genital organs is indicated.

Their particular sphere of usefulness is in Vaginites, Leucorrhoea, Endometritis, Prolapse of the Uterus, and Menstrual Disorders, especially those incidental to the menopause.

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of November 15, 1897.

The President, W. E. KIELY, M.D.,
in the Chair.

W. EDWARDS SCHENCK, M.D., Secretary

DR. TH. A. CHRISTEN read a paper
entitled

Transient Amblyopia
(see p. 1).

DISCUSSION.

DR. ROBERT SATTLER: Dr. Christen has given us a complete account of migraine from the standpoint of the oculist.

The subject has always been one of great interest to me. The late Dr. Williams was a frequent sufferer from "flimmer-scotoma," followed by intense hemicrania.

That many distinguished physicians have suffered from this annoying malady is well known, and the accurate personal accounts of a number of eminent men are embodied in a book or monograph. Prof. DuBois-Reymond has given a most complete account of the subject. It was my good fortune years ago, at the house of Prof. Donders, in Holland, to listen to a personal account of his sufferings, in which the eye symptoms occupied a prominent place.

The physician probably sees a larger number of cases of migraine than the oculist, since patients affected with blind or sick headaches usually consult a physician, not an oculist. Only those instances in which the ocular symptoms are conspicuous and the neuralgic attendants of lesser importance, or in which at first an attack of "flimmer-scotoma" develops, fall under the observation of the specialist.

I wish to call attention to a point not fully referred to by Dr. Christen in his complete report, and that is the occurrence of the disease in the very young and the aged. In both extremes of life it is met with, but is of uncommon oc-

currence. I have at present under observation a boy of neurotic parentage and individual tendency who has most pronounced attacks of migraine, followed by prostration and symptoms so pronounced that recovery is protracted for weeks. At times its onset is epileptiform in character.

Another point not referred to is the appearance of a typical complex of ocular symptoms without neuralgic disturbances.

DR. S. C. AYRES: I have suffered from this condition. In my first attack I had hemiopia, and asked Dr. Williams to examine my eye. As the doctor stood up before me the hemiopia was sharply defined; I could see but one-half of him. He assured me that nothing was wrong. At another time I had an attack in New York, and consulted Dr. Knapp, who examined my eye but found nothing. I usually found that it followed a hard day's work. Upon one occasion, when I had an attack, unintentionally I made severe pressure upon my common carotids, when the condition immediately disappeared. Upon another occasion I used the same method with similar results. I would like to recommend this method of treatment.

DR. S. C. AYRES read a paper entitled

*The Non-Operative Treatment of
Strabismus Convergens*
(see p. 6).

DISCUSSION.

DR. C. R. HOLMES: Conservatism in surgery is always to be commended so long as other means will bring about the desired results, but we should not make the error and wait until the chances for successful operative interference are greatly diminished or past.

I cannot entirely subscribe to the views of the essayist as expressed in his paper to-night. I believe that in nearly all children where there is decided error of refraction we should first try the use of glasses. But we must not forget that an error of refraction is not the only cause of strabismus. In many cases we have congenital or acquired weakness of one or more ocular muscles as the primary cause; lowered vitality; strain from

too constant application at close range; an injury to or inflammation of the affected eye, necessitating its closure for any length of time, during which the enfeebled muscle loses its tone more readily than the non-affected opponent, resulting in strabismus when the eye again functions.

I believe that one reason why many cases formerly operated upon became over-corrected, resulting in an over-correction, was because the sub-conjunctival tenotomy was generally employed, and the tendon not always cut close to the globe; in fact, the muscle itself was now and then cut, naturally resulting later on in deformity. With the advent of asepsis we no longer dread infection, and I believe in the German method of freely exposing the tendon, so that our scissors may be guided by vision and not by touch.

Unless there is very marked and continued improvement, I do not believe in waiting years to see if glasses will correct, during which period we are likely to have the amblyopia of the non-used eye constantly increasing unless faithfully trained, a matter in which patients are seldom faithful. The wearing of glasses as an experiment for five, ten or fifteen years is not agreeable, neither to parents nor children, and is especially obnoxious to young women. The consensus of opinion among our best authorities is pretty thoroughly expressed by Prof. Fuchs, of Vienna, in his last work, where he says that glasses have in his experience done little to correct strabismus, the cases generally requiring an operation.

DR. LOUIS STRICKER: I, for one, am glad to state that I have never made a tenotomy, and feel satisfied that in the great majority of cases the condition can be corrected by a proper adjustment of glasses.

In convergent squint the condition is due to hyperopia; for instance, suppose a person has a hyperopia of two diopters. Hence, for distance he already carries this load of $+2D$; if he tries to see at 25 cm. he must use, besides his $+2D$, $+4D=6D$. The angle of convergence, however, is equal to the dioptric power employed, so that he is using

6° of convergence, and his eyes will be converged to a point 16.6 cm., whereas his eyes are focused for 25 cm.; in consequence he does not see distinctly. In his effort to see distinctly another factor comes into play; he draws one eye outward by exerting a power equal to 2° on one external rectus, with which the internal rectus of the other eye is now acting in consonance. So that, for example, if on the right eye the excess of 2° is counterbalanced by 2° ; on the externus on the left eye, this will be added, so that the internus of the left eye carries $2D+4D+2D=8D$, which would make the left eye converge to a point situated at $12\frac{1}{2}$ cm., and convergent squint is produced. The same result follows where the left eye fixes; then the right turns in, and thus alternating or concomitant squint is produced. Put on the proper correcting glass and the delicately adjusted balance is once more placed in equilibrium and the strabismus disappears. Conversely, one can explain divergent squint.

I can not believe that faulty muscular innervation causes strabismus in young children. A theory which appeals to me very strongly has been recently expressed by Phil. Steffan, of Hamburg (*Graef Arch.*). It has been proven that in an eight months fetus the nerve fibres, as they grow backward from the ganglion cells in the retina, have not as yet formed complete connection with the brain. Hence a child born at that time does not see, though the retina is perfectly developed. This connection is only complete in children born at term, and even here the sheaths of the fibres are not perfectly formed until about the tenth month of extra-uterine life, so that up to that time there can be no absolutely perfect conduction to the centres in the brain. He designates all cases of blindness due to interference this side of the chiasm as ambliopias or amaurosis, whereas those due to interference in the ganglia of the brain or in the cerebral cortex (occipital lobe, median surface, cuneus) as anopsia.

Steffan contends that though all the connections be complete if the cells in the cortical layer of the occipital lobes (cuneus) are not connected by fibres

with neighboring centres, as, per example, those for form, color, space, also with the motor areas and those of consciousness, there can be no proper recognition of the objects seen. These fibres are designated as *transcortical* and *transcommissural* fibres, and these develop but slowly after birth, are not fully developed until the fourth year.

The education of the visual act is empirical. The child first learns to carry out binocular fixation, but does not at once accomplish fusion of the two retinal pictures. Perfect constant binocular vision cannot be carried out until there is a perfect development of the transcortical and transcommissural fibres in both hemispheres. If these fibres are but poorly developed or entirely wanting on the one side, the corresponding eye will see but poorly or not at all, and soon binocular fixation is given up; strabismus follows without disturbing diplopia.

"If binocular vision is but partially or not learned at all, there is no hindrance to the eyeball becoming the toy of muscular action. The moment binocular fixation is given up strabismus is produced without diplopia appearing. Neither ametropia nor reduction of vision, nor unequal refractive conditions, is the ultimate cause of strabismus. All these conditions are found in the non-squinting."

In children it is due to a defective development of the transcortical and transcommissural fibres, which are the means by which it is made possible for binocular vision to become empirically developed.

Thus the theories of forcible suppression and exclusion of the retinal picture on one eye fall to the ground, as does also the amblyopia from non-use.

Steffan further draws attention to the education of sight in those congenitally blind from congenital cataract. Here, after successful operation, the patient sees, but cannot recognize the objects seen until after sight has been educated by employment of other senses, such as touch. The object once recognized by aid of other senses is ever after recognized on sight.

From the above the inference may

be drawn that both eyes are to be exercised separately, so as to prevent a total cessation of stimulation of cerebral cortex on either side. Further, in cases where the one eye is defective, by stimulation (that is, by covering up the good eye and forcing the defective eye to attempt to see) the visual centre and its connecting fibres which make it possible for us to understand what we see, may be aroused into activity after having been dormant many years.

DR. ROBERT SATTLER: The correction of strabismic deformities by the aid of lenses is always an interesting and difficult problem. We all know that even pronounced strabismus (but this applies almost exclusively to convergent squint, associated with hyperopic refraction) is often relieved by the discriminate selection and faithful use of corrective lenses. Certain it is that after a careful examination and determination of the optical error, an attempt should be made to overcome the strabismic deformity by the aid of lenses. Only if this fails after a fair trial should surgical treatment be resorted to. In some cases the optical treatment is eminently successful and gratifying to both patient and physician; in a larger proportion, however, it is not.

Strabismic defects are generally associated with other deviations from the normal on the part of the skull and orbit, or are dependent upon obscure central disturbances influencing the innervation of the muscles and visual areas themselves. In other cases an increase or decrease of strength of the muscle itself or its antagonist defies any and every attempt at correction by lenses alone; or, again, such pronounced degrees of heterophoria are found that correction with lenses or prisms, or both, is both inexpedient and impossible.

Surgical treatment, in most cases of confirmed strabismus after lenses have been faithfully tried, is the only rational measure which expediency and experience suggest, and with the precautions observed by every specialist, improved and simple technique and more delicate instruments, one should not hesitate to resort to surgery to relieve the unsightly deformity.

DR. TH. A. CHRISTEN: It is not only for cosmetic purposes that we endeavor to correct strabismus, but also for the purpose of *conserving or restoring the normal vision in the squinting eye* as much and as soon as possible. We know that an eye which does not take part in the act of binocular vision becomes "*amblyopic from non-use.*" Therefore, those cases who are not benefited by the optical correction ought not to be delayed too long, but operated upon. By restoring the normal position of the eyes and the visual axes we often restore the binocular vision, and the perhaps already impaired acuity of vision, and this will be the more probable and give the better chances the younger the patient is; in later years these chances of recovering the impaired vision become less and less, and the amblyopia may have increased to such an amount as to make its improvement an impossibility.

I recall a case demonstrating this: A girl of about eighteen years of age, who had convergent strabismus since childhood, lost her good eye through a keratitis. Although the *other highly amblyopic* eye was put into *constant practice*, the amblyopia did *not* in the least change during the almost three years of my observation, and I doubt whether it will ever do so.

If in this case the eyes had been "straightened" early in the patient's life, the binocular vision would perhaps have been restored, and with it the acuity of vision. This but illustrates the necessity of corrective measures for the conservation of the usefulness of the squinting eye as soon as possible, and before "amblyopia from non-use" sets in. If this once has reached a certain degree it becomes almost impossible to restore the acuity of vision.

E. Gaval ("Manuel du Strabisme") has devoted some thirty years to this task, and in many hundred cases has succeeded in correcting strabismus and restoring already impaired vision to the normal standard, but by such complicated methods and such an amount of time devoted to the individual case that he does not advise the application of his methods himself, but advises the much

more convenient operative correction of strabismus.

DR. C. W. TANGEMAN: There is probably no other chapter in our textbooks on ophthalmology to-day that will bear revision more thoroughly than the one that treats of the subject of strabismus.

We do not understand all of the factors that enter into the cause of this deformity. The indiscriminate tenotomy of former years is faulty, inasmuch as no attention was given to the causes of the trouble; immediate relief was all that was asked. The cure of every case by the use of glasses is just as unscientific, because it is a well-recognized fact that many squinters are ametropic, and many squint in spite of the glasses. Quite a large percentage of the cases that are tenotomized in infancy and early childhood for the relief of internal squint fifteen or twenty years later developed an external deviation. In these cases there was no attention paid to the refractive condition of the patient prior to the operation. Sometimes, too, one, two and three operations on the internal rectus muscle failed to give the desired relief. Some of these operations failed possibly because the patient had to be anesthetized, while to-day the operation can be done with cocaine and the operator can determine the effect of the tenotomy; increase it or counteract it at the same sitting. Every clinician will testify to the fact that he has seen cases of squint that were amblyopic in one eye and made a full recovery by the age of puberty without any treatment whatever. The same can be said where the patient sees with both eyes, whether he is hypermetropic or emmetropic. True, there are cases that make a good and permanent recovery after a tenotomy; others do the same using glasses; others fail despite the use of every known measure.

The greatest point of interest in connection with these cases is to be able to determine the cause. If it is a refractive error give glasses—give them as early as the patient can wear them; it may be necessary later to add a tenotomy of one or both internal recti muscles, or even an advancement of the external recti

muscles. I should like to have this question answered, why do patients operated on in infancy go along satisfactorily for twenty or thirty years and then develop an external squint?

DR. CUNDELL-JULER: I am glad to hear a paper read by so practical a gentleman advocating the correction of some forms of strabismus by the use of spectacles. Forty years ago, before specialists were generally abroad, when general surgeons, as Lawrence of Bartholomew, Bowman of Kings, and Critchett of the London Hospital, were eminent oculists, I was taught to practice in all branches of medicine. I had frequently to operate in ophthalmic surgery for strabismus, as well as in cataract and for extirpation of the eyeball. There was always this difficulty in strabismus, to distinguish between the false and true form. It is obvious that the use of glasses would facilitate diagnosis. I have corrected strabismus by advising patients, when riding on an omnibus, to direct their eyes steadily on some distant object, as a church spire. A squinting girl in England is not admitted to family service, lest the children might acquire the habit of squinting. I have operated on adults very successfully in this country.

A New Hemostatic.

According to Dr. Gundrum, the fluid extract of the life root or rag wort (*senecio aureus*) possesses powerful hemostatic properties, which he was enabled to turn to good account in the treatment of cases of hemoptysis and hematuria. The plant has long been employed unofficially as an expectorant and diuretic, and it has been credited with a "peculiar" but undefined action on the uterine functions. It does not appear to possess any directly astringent properties, and it is surmised—though suggestion savours of a *pis aller*—that its hemostatic action is brought about through the vaso-motor nerves.—*Med. Press and Circular*.

It has been mentioned somewhere by a noted German physician that mouth-breathing in many cases has been the cause of nocturnal enuresis.

Translations.

TREATMENT OF DYSPEPSIAS BY MASSAGE.

BY DR. M. H. HUCHARD.

TRANSLATED BY THOMAS C. MINOR, M.D.,
CINCINNATI.

I always remember a patient whom I treated for dyspepsia, some fifteen years since, who exhausted, without result, and even with an aggravation of symptoms, all the various drugs, from acids to alkalies, from bitters to agents supposed to relieve digestive disorders. Seeing the increasing lack of success of my medication, I called Dr. Levin in consultation, who likewise prescribed medicines, but in infinitesimal doses, in order to seem to be giving, but whose real medication was based upon alimentary dieting. The attempt was not successful, for the patient, besides his dyspepsia, was attacked by a true "medicamentous gastropathy," too often the work of a physician, but was finally cured in a complete and definite manner.

Since that epoch I profited by this therapeutic error, for in medicine avowed errors are always profitable, and thereafter only prescribed medicines in diseases of the stomach when such remedies were expressly indicated. Professor Hayem does the same way, and, after having shown the frequency of medicamentous gastropathies, expresses himself as follows:

"It is necessary, in order to treat the stomach, to inquire as to the way in which it acts, and then strive as much as is possible to treat the organ in a roundabout manner. Remember, too, what Tissot remarked at the end of the last century regarding the treatment of nervous conditions. So that I hold to the passage I used in 1882, in my article on 'Neurasthenia,' in the 'Treatise on Neuroses', i.e.: 'One can show himself to be a great practitioner without prescribing medicines; the best remedy is often to prescribe nothing.'"

These words may be deeply engraved on the tablets of your memory.

I speak to you now as students about starting out in practice, who have an altogether too natural a tendency to abuse the use of drugs.

Now, nothing is easier to prescribe than medicine; nothing is more difficult to follow than dietetic rules and physical instructions.

Shall we say there is nothing to do in dyspepsia? Far be it from my even hinting at such a thing. Then we have alimentary *régime*, the employment of electricity and hydrotherapy, which I shall mention further along; then, too, we shall treat of *massage* and its indication in stomach affections.

Massage is as old as the world, since history teaches us it was practiced in China three thousand years before the Christian era—a process that has been used by all kinds of practitioners, and something every one, so to speak, has at his finger ends.

In the last few months we have seen that several patients in our service have been confided to the care of Dr. Cantru, author of a most remarkable thesis on this subject.¹ The good results of this treatment make it worthy of much attention. Let me add that M. S. Berne, at my instigation, published an essay on the treatment of constipation in 1889, the subject being a patient I sent him. Dr. Courbade has made this question and that of electricity the object of very instructive investigations. Finally, my colleague, Dr. Barie, is the author of a very general documented review on "Massage in Medical Affections." In two theses of Paris, most useful works to consult, Hirschberg in 1889 and Flamm in 1893, it has been demonstrated that the effects of local massage may be grouped into mechanical, chemical and nervous effects:

1. *The mechanical effects*, which consist in the augmentation of contractions of the stomach, consequently in the reduction of the duration of time food remains in this organ, which has all been demonstrated by the following experiments:

After a stomachal massage Chipoli-

anski¹ determined by the aid of a sound that the sojourn of food in the stomach only lasted half the time usually. Hirschberg gave fifteen grains of salol, that is known to remain in an almost normal state from two hours to four hours and a half before the first traces are discovered in the urine; after massage it showed itself on the way to elimination an hour sooner, and elimination then proceeded rapidly. The same results were confirmed a few months later by Eccles.²

We know, moreover, that general massage ends in very marked circulatory and nutritive changes; that nutrition, indeed, is made more active, and that there is an increase in the assimilation of nitrogenous substances. Finally, according to the investigations of Poulonbinsky,³ abdominal massage increases the amount of urea and has a manifest diuretic influence—that is to say, in passing, a result not to be disdained in the treatment of cardiopathics.

2. *The chemical effects*. These have been well studied by the investigations of Cantru, who has studied the glandular elements of the stomach. The chemical effects are as follows: (1) The approach of stomachal chimism towards a normal condition; (2) the re establishment of equilibrium in the collection of chimisms, by lowering of too high values and the elevation of insufficient values; (3) action upon the circulatory troubles by the augmentation and regulating of digestive evolution.

3. *The nervous effects*, which are as follows: Sedation of pain and reflex exaggeration, excitation of dormant reflexion.

Such an efficacious medication should be recommended, when it excites the appetite and prevents stomachal strain by a more rapid alimentary evacuation, preventing as well certain gastric fermentations, awakening dormant secretory activity of hypopepsia or moderating hypopepsia, at the same time being a sedative of parts or an excitant of stomachal muscularity. It should be seriously considered, too, since it may

¹ "Treatment of Dyspepsia: Massage of the Stomach and Its Connection with Stomachal Chimism" (These de Paris, 1894).

¹ These de Saint Petersburg, 1886.

² The Practitioner, October, 1889.

³ Vratich, 1889.

combine, at the same time, medication of the sick stomach and intestine; since it may act on the liver, too, upon that "torpid liver" of the English, as well as upon the pancreatic juice; since it may cause activity of intra-abdominal circulation and thus increase diuresis. And it is not only in simple dyspepsias, with or without stomachal dilatation, with or without hypo- or hyperchloridia, that this external medication produces good effects, but it is also in the symptomatic dyspepsias of the tuberculous, the chlorotic, the nervous patients attacked with relaxation of the suspensory ligaments of the viscera, heart disease cases, etc.

Among these latter cases, remarks Cantru, "abdominal massage, combined with general massage, happily reestablishes the circulation, relieving the altered myocardia, which, with less effort, would be benefited."

According to Federn,¹ in arterio-sclerosis the elevation of sanguinary pressure is not always the forced consequence of alteration of the arterial walls, and the proof is that it may close with the excitation of the great sympathetic. This is an opinion I have defended, on my part, for many years. Since I admit that vascular lesions in arterio-sclerosis are preceded by a more or less long phase of arterial hypertension, it results that in relative cardiac insufficiency it is necessary to seek, not to increase the force of the myocardia, but to diminish peripheral resistance, of which a German author places the origin in intestinal atony.

Aside from this latter opinion, that to me seems to be exclusive and but slightly comprehensible, all is just, and you know full well that for a long time I have not ceased to repeat to you that one of the great principles of cardio-therapy is contained in the *ukase, take care to strengthen the heart's action.*

What is in the different dyspepsias the technique of massage of the stomach? The patient must be placed on a hard bed, easily approached from both sides,

the seat a little elevated, the thighs demi-flexed upon the pelvis in slight abduction in order to put the abdominal muscles in a condition of relaxation; the mouth should be half-opened, respiration free; small inspiration, however, to avoid abdominal tension resulting from the too rude crowding of the stomach and intestine. This done, we can distinctly outline the stomach, and the operation of massage may be *superficial* and *profound*.

1. *Superficial massage* is different following the result one wishes to obtain; simple rubbing of the gastric region, interrupted from time to time with the pulp of the fingers for the purpose of awakening and tonifying the physiological action of this organ (gastric dilatation with hypopepsia); gentle frictions with the palmar surface of the hand for the purpose of producing a sedative action on gastralgic pains. All authorities recommend the practicing of these manipulations from left to right—that is to say, from the cardia toward the pylorus. Cantru, to the contrary, thinks massage may be practiced indifferently from right to left or from left to right when it is prefaced with superficial massage to calm pain, excite glandular reaction, to crush the food and not to expel it. Superficial massage may be practiced during the first hour after a meal.

2. *Deep massage* should never be practiced in cases of painful dyspepsia; it is preferable to commence by a superficial sedative massage up to the point that anesthesia of the region has been obtained. This is the process indicated by Hirschberg.

In separating the fingers of one of the hands we place the fingers of the other hand in the inter-digital spaces, thus forming a kind of comb or brush; with this surface we come to produce on the greater part of the stomachal surface deep pressure, that must be directed to the greater curvature and left extremity of the stomach towards the pylorus. After these measures we proceed to use the trembling motions of Georgi, applying the hand on the level of the gastric region, compressing in a light way suddenly and intermittently,

¹ Societe Imperiale et Royale des Medecins de Vienne, 1894.

and finish the *séance* (lasting from fifteen to thirty minutes) by massage of the intestines. Deep massage should only be practiced two or three hours after liquid nourishment, four or five hours after solid nourishment.

The contra-indications are all gastropathies accompanied by ulcerating processes (cancers, gastric ulcers, etc.), acute and febrile maladies of the stomach, dyspepsia characterized by acceleration of digestive evolution.

I have now indicated to you the salient points and processes of massage to be employed in the two chemical opposing types—hyperpepsia and hypopepsia.

Doubtless in hyperpepsia a special alimentary *régime* and alkalines in high doses are beneficial. But, whatever may be said, well managed massage may become a valuable adjuvant to these indications, and Cantru remarks, with justice, that if it renders service in the case where stomachal chimeism shows a relaxation of digestive evolution, it might become injurious in contrary cases (acceleration of digestion).

During the first period of digestion, that is often painful, one may resort to superficial sedative massage; later, three or four hours after meals, we often see phenomena of alimentary stasis and abnormal fermentation; in such cases a deeper massage will be indicated in order to excite gastric muscularity and expel all alimentary residuum.

In hypopepsia the gastric mucous membrane reacts badly to the contact of food, the glandular secretion and muscular contraction are insufficient; from thence the passage into the intestines of incompletely digested food. Here massage can increase digestion and tonify the organ. It must from the start be imperfectly sedative when there is pain; afterwards deep and constant in order to awaken the diminished or abolished stomachal reflex. It acts then as a true digestive massage, capable not only of increasing the work of digestion, but also to prevent alimentary accumulation, fermentation and dilatation that follow.

Evacuating massage is an aid to digestive massage. It should be deeply applied, directed from the cardia towards

the pylorus. Hayem recalls the fact that the "gourmands of antiquity, who experienced swellings after their meals, got in the habit of striking their stomachs with their fists in order to provoke evacuations."

Such are the indications of the good effect of massage in dyspepsia. In order to make them known I have drawn on the best medical sources, and have inspired the investigations on the part of the best known and most competent authors. My small personal experience has taught me the incontestable importance of this method of treatment. I ask every medical man to use it more often in such cases, without, meantime, abandoning other useful medical adjuncts, among which may be cited hydrotherapy and electricity. Remember, for an instance, this therapeutic triad: "*Much alimentary hygiene; local massage in the majority of cases; few or no medicines.*"

Michael Angelo and His Prescriptions.

A curious discovery has been made in the Vatican Library, namely, that of a collection of prescriptions and directions for treating various diseases of the eye in the handwriting of Michael Angelo. The belief is that the great sculptor, who suffered from some eye trouble, obtained the prescriptions from his medical friends, and then copied them out. The number of the documents in question seems to suggest that Michael Angelo made many applications for advice. Possibly he was not satisfied with the results of the treatment, a likely assumption enough in view of the benighted times in which he lived. He died in the year 1546, a period in which but little could have been known of eye diseases and their treatment. But, however this may be, it would be interesting, from the point of view of medieval history, to learn of what the prescriptions consist. Perhaps permission might be obtained to translate them. Their translation would probably reveal many things, and not the least the fact that Michael Angelo was a bold man in following the advice tendered him.—*Med. Press and Circular.*

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CREMATION.¹

BY SHELBY MUMAUGH, M.D.,
LIMA, O.

What! Does not death end all? Is it true that our obligation is not canceled when the patient dies? Must we as physicians, with a due valuation of human life and a proper knowledge of our responsibilities, to ward off sad travesty on our profession and redeem this wide world from the power of contagion, follow the human form of clay to its final disposal? If, as is maintained by some, the dismal bed where tenants of the grave slumber is as deadly to the living as the famous Upas tree of the Java forests and the dragon teeth of deadly disease arise in epidemic proportions, like the fabled sphinx from the ashes of its death, then we must not show a lack of consideration for its power of evil, for not only disease, but also its prevention, lies within our province; and the physician who fails to lend a helping hand toward the prevention or spread of disease does not do his full duty to himself, to his profession and to humanity. The study of preventive medicine has become of paramount interest to physicians, though it certainly has not been conducive to their pecuniary profit. From the cradle to the grave (and elsewhere when cremation is in vogue) our realm seems to extend. Practical ideas come up in this question regarding the prevention of contagious diseases—the dread enemies of civilization now and in all ages gone

by. While this subject has other phases, to us, then, it should be given a sanitary hearing, for the health of the tree of life is our study.

Cremation as a means of disposing of the bodies of the dead is attracting widespread attention and calling forth interesting discussion as to the relative merits of this method as compared to the usual custom of under-ground burial, after the form of humanity has yielded to nature when the ties of human life were sundered. Just like those free-silver advocates who incorporate the gold clause in their own securities, there are many persons who are strongly urging the absolute necessity of cremation for the other fellow, but earth burial for themselves. As an expression of similitude without the signs of comparison, it may be said as a metaphorical turn that every press representative knows well how delighted people are for others to occupy the gridiron and get an artistic "roast."

Sanitation is the fortress from behind which these disciples of Æsculapius' daughter (Hygeia, who watched over the health of man) have been firing in order to dispose of the bodies of the dead without violence to the health of the living. Science has shown that burning produces quickly what putrefaction takes a long time to do. It is urged that incineration of the tainted bodies of those persons who die of contagious diseases would lessen the danger of contagion and take away a menace to the health and life of humanity, for wherever living man peoples the earth history records the enormous triumphs of death from the ravages of such diseases. It is said to be cleaner and cheaper than earth burial. It would entirely destroy the fear of being buried alive. There could be no danger except

1. Read before the Northwestern Ohio Medical Association, at Toledo, December 16, 1897.

that of being burned alive. Fontanelle and Carre declared that premature interment was not infrequently the means of consigning living individuals to the tomb. It is said that premature interment once happened to Winslow, the celebrated Danish anatomist. He was restored, and ever afterwards paid much attention to the uncertain signs of death. It was surely a "grave" mistake. Body-snatching would come to an end, too, if earth burial was forbidden by law, as Dr. Rugensburger earnestly demands. The present generation vividly recalls, of course, the stealing of the remains of A. T. Stewart and Scott Harrison while sleeping their last sleep.

Old cemeteries in Greater New York, Philadelphia, Cincinnati and other large cities have been converted into public parks. Once Washington Square was a place of burial. The forward march of progress in nearly all cities makes possible the disturbance of burial grounds, and those which are the finest and largest to-day may in the dim distance of the future come to be used for other purposes. All of this is urged as reasons for incineration.

Bacteriological claims assert that pathogenic bacteria are deposited in the ground in an active condition, capable of infecting unless the poison is destroyed by the embalmer. The fine-spun theories of German speculatists and others of a highly creative and vividly imaginative course of human thought were expected to show by means of bacteriological examinations that the Klebs-Löffler bacillus, which may be or may not be the cause of diphtheria; Hansen's bacillus, which may be or may not be the micro-organism of leprosy; Gaffky's germ of typhoid fever, Koch's tubercle bacillus, and now Sanarelli's bacillus icteroides of yellow fever pathogenic fame are capable of rising to the surface of the earth and infecting the air or being carried through the movement of the ground-water into wells in the vicinity. The contamination of water by animal impurities has been known since the sixth day of creation. It is contended that living virulent bacteria may be preserved in the bodies of earthworms for months. If these

claims are true danger would arise through such channels from the use of contaminated drinking water and by the inhalation of infected air. It is but a spirit of fairness to say that they are partly true and partly false. On these grounds, anyhow, it is held by many that bodies after death from various contagious diseases ought to be cremated, not buried.

Cremation was largely the general practice of the ancient world. The Greeks incinerated the dead early in the history of the great races of mankind. In Japan cremation is to-day the general custom of the Monto sect. Upon hill-tops are "Towers of Silence," where the Parsees, the followers of Zarathustra, exposed their dead to birds of prey. In South Australia a people desiccate bodies by heat and afterwards hide them in the tops of trees. Upon rolling the current of human affairs backward to the ancient Peruvians, we find that they dried the bodies of the dead in the sun before inhumation. At the disposal of wild dogs the Aramaeans were known to place their dead. The Hindoos often throw dead bodies to river monsters and Kaffir tribes give their dead to wild beasts. To some extent sea burial is practiced. It is strongly recommended by some sanitarians. It is thought by some that the form of humanity might be petrified and some German sanitarians have considered encrusting it in cement. Other methods are and have been employed.

The earth has made only twenty revolutions around the sun since Italy commenced cremating, and less than this since the first crematory was built in Germany, England or France, yet cremation has already gained a firm footing in all these countries. In our own dear land cremation has planted its twelfth milestone upon the road of time, marking progress in a geometrical ratio at every point. On Long Island, at Fresh Pond Crematory, December 4, 1885, the first incineration in this country took place. From this date this method of rapidly converting the human body into its ultimate constituents has been growing in popularity. Down through its short history to the begin-

ning of the present year the total number of incinerations at Fresh Pond were 1,881. A large number of our large cities now have their crematories. Cremation of the indigent dead is an innovation which belongs to the "City of Brotherly Love." The facts are that this method of disposing of the bodies of the dead has been growing in public favor in many countries the world over. In Paris more than 20,000 bodies have been incinerated since the establishment of a cremation society. To an extent the reason for this may be told from the fact that it is being backed and pushed by cremation companies having at heart their own mercenary welfare. Some physicians who may be financially interested in these companies have been crowding sanitation and the prevention of diseases to the foreground while playing upon this field of investment. By all means it is necessary for us to keep our eye on cemeteries and see to it that they are properly located for esthetic reasons if no other, but in my opinion the danger of the dead to the living has been greatly exaggerated. Leaving the question of danger to health entirely out of consideration, one does not care, however, to sample ancestors in drinking water.

During a time of calm, in the strata of air over a cemetery, Selmi claims to have discovered micro-organisms dangerous to life. A notion that the poisons of cholera, diphtheria, small-pox, scarlatina and typhoid fever are transmissible through the earth from the inanimate clod of clay has taken possession of Playfair. From others of equally high authority like opinions could readily be multiplied, and are, of course, worthy of consideration. Standing out boldly for cremation are various conclusions supported by every prop in the bacteriological world, from unquestionable verities to deceptive illusions. It may as well be said now as a decade later that it is evident to every student of medical history that always and everywhere there has been some dogma in fashion in medical science. For all time to come this era of historic medicine will be known as the germ age. A world of facts has been established by careful

and painstaking investigators in the domain of bacteriology. Such truths have been nuclei for vague and chimerical speculation, bringing about unproved conclusions which have been published and accepted as verities, upon which a basis for cremation is being constructed. This age marks the periodical recurring of a dominant theory of mental and moral commotion in the medical world of thought.

Progress has been the watchword signaled all along the line of medical science ever since the days of Hippocrates. It is the motto of our profession, yet medical fashions have always been revolving—sometimes in a spiral upward, sometimes in a vortex downward. Historic medicine has been repeating itself, but each rotation of the cycle has been either above or beneath where it was before. Germs are being told off by this cycle, and as a result cremation is the demand of this sanitary era. Old Earth seems well calculated to take care of germs. To them the soil is the "Black Hole of Calcutta." This assertion is made, too, in the very teeth of the language of Sir Henry Thompson, that "No dead body is ever placed in the soil without polluting the earth, the air and the water above and around it." This surgeon-extraordinary of the king of the Belgians is an enthusiast with a dominant fixed idea for cremation. It was he who brought this subject so prominently to public notice by an article in the *Contemporary Review* in 1873, and one year later founded the London Cremation Society.

Through a good filter under the ground germs are not found. This was shown by trustworthy experiments at Lawrence Station, Massachusetts. The spirillum, the tubercle bacillus and the bacillus of typhoid fever deposited in a grave rapidly lose their activity and soon become inert. This fact was established by the careful and repeated experiments of Esmarch, Hoffman and Schattelius. They selected bodies in which the reputed pathogenic microbes were found before death, and among these trustworthy investigators the consensus of opinion stands to disprove that even graves holding bodies dead from such

devastating diseases are long dangerous to the surrounding community. Inactive was the comma bacillus found in a fortnight, the bacillus of typhoid fever in a month, and the tubercle bacillus in three months. Modified somewhat was the period of their activity by the condition of the soil and the material of the casket. The certainty that reputed pathogenic bacteria cannot remain active any great length of time, either in the soil or ground-water, shows that the danger from the grave is not as great as cremation societies would have us believe it to be. Ground-water is generally free from germs, as has been shown by repeated experiments. Esmarch and other bacteriologists say that they die sooner in soil saturated with water than in dry ground. Bodies buried along underground water courses might be dangerous for a time, but all of the poisonous products of putrefaction become so diluted by ground-water, neutralized by the soil or converted into carbonic acid, nitric acid, ammonia, etc., by the action, it is said, of saprophytic bacteria, that they lose their dangerous qualities. These views are supported by Brieger and Pettenkofer. Bacteriologists themselves do not believe that the gaseous products of putrefaction can have a detrimental effect on health nor cause disease. Old cemeteries where bodies have been buried for years are free from danger, for there reputed pathogenic bacteria have long since ceased to be active. Some die for want of oxygen and others have not had the necessary nourishing material. Then, too, the bacteria of putrefaction will soon outgrow all pathogenic germs and alleged pathogenic germs, and the latter will perish.

Thus far it has been the object sought in this paper to meet the enthusiasts for cremation on their own ground—the field of bacteriology. Now suppose that the coming race, a quarter of a century hence, as the advance of medical science goes on, should in their strides of progress turn down the bacteriological theories of to-day, then what? Have not just as startling overthrows repeatedly taken place in the history of the medical past? The microscope has re-

vealed an infinitude of living growths in forms too minute for the unaided eye to behold. In the language of another, "Every particle of matter is peopled; every green leaf swarms with inhabitants. There is scarcely a single humor in the body of a man in which our glasses do not discover myriads of living creatures." Bacteriology has become a part of the curriculum in medical colleges, and pathogenic organisms are supposed to be the specific agencies producing the respective forms of various diseases. It may justly be said that facts closely observed have in numerous instances failed to confirm the assertions respecting the morbid action of bacteria in many diseases. In the instance of the spirillum or comma-bacillus of cholera the downfall was almost complete. This little trickster was not always present in cholera, and was also found in other forms of disease. As time went on four different forms of bacilli were announced for this disease. Each had its discoverer proudly insisting that his was the genuine Dromio, and that all others were spurious. It then came to pass that Pettenkofer, at different intervals and in various conditions of health, swallowed quantities of these micro-organisms and received no harm from them. Now Powell, of Los Angeles, is in the business of swallowing and subcutaneously injecting various kinds of deadly germs and of feeding them to willing patients with impunity. So frequently has the Klebs-Löffler germ existed in throats without diphtheria and the disease raged without the germ that bacteriology now places much less dependence than heretofore in this germ, so recently held to be the specific cause of the malady. In these diseases there are surely missing links between the germ-theory and unequivocal facts. Even enthusiasts differ so widely in the germ theory of disease. I sometimes wonder if many physicians do not become converts in this line to the extent of accepting almost everything written and said about germs without first becoming inquirers concerning proved conclusions. You may be whispering in your hearts, it seems to me, that a want of harmony exists between these

views and the present standard of medical orthodoxy. It is now my privilege to say that upon this subject a spirit of tyranny overhangs the medical profession at this time, milder in form but not unlike that which characterized various religions in days gone by. Believe as we do or off goes your head, said religion in time past, for such is the kingdom of heaven. Believe the Catholic faith or die, said Charlemagne to the Saxons, and they believed. They snatched religion from the point of the sword. Accept the theories of bacteriology, both proved and unproved, says a large proportion of the medical profession to-day, or accept none. Let this be as it may, if only the speculation outside the domain of proved facts in bacteriology was crushed to nothingness, what would become of numerous pet theories upon which cremation stands?

One of the most forceful objections to cremation is that in poisoning and some cases of murder by other means all traces of evidence would be destroyed. The murderer might go free, perhaps even without trial. The recent murder of Bessie Little, in Dayton, O., is a fair example of the way in which crime might pass by unpunished. Without a wound being found her body was buried. It was exhumed and re-buried without discovering evidence of violence. Another time it was exhumed, when in one ear two bullet wounds were found. The greatest evidence against Albert Franz would have been destroyed by incineration of the body of Bessie Little. Every now and then bodies are buried without even a suspicion of poisoning coming up. Later developments necessitate exhumation for evidence as to criminality. Thus you see that cremation would deprive officers of the law of the most valuable evidence in bringing criminals to justice in this class of cases.

As the wheels of time roll us to the brink of the future, the funeral director is abreast with the times in professional skill and scientific progress. To prevent the loss of life by the spread of contagious diseases is one of his chief aims. Embalming is becoming a science. The modern method of arterial and cavity injections by powerful solutions capable

of destroying the agencies producing contagious diseases, whatever such agencies may be, is capable of removing the chief objection to earth burial. Then, too, crematories are expensive, and cannot be located in all vicinities as cemeteries now are. This would necessitate the transportation of bodies to a much greater extent than now exists, which would increase the danger of spreading contagious diseases in a like ratio.

The sentimental part of this question is not to be ignored. A feeling which pertains to our humanity tells us that cremation is revolting to the finer part of man. Earth burial is the most proper and adequate means of disposing of the bodies of the dead. The great disinfecting bosom of Mother Earth is well calculated to care for the human clod of clay. Cemeteries are disturbed frequently, it is true. They are too often uprooted to make room for some more lucrative investment. The rights of the dead are invaded and ignored. Let the dead forever live in the heart of the living.

The Treatment of Tuberculosis by the Salts of the Blood.

Stadelmann (*Bulletin Générale de Thérapeutique*) has suggested that in a certain number of cases of tuberculosis there is a decrease in the normal saline constituents of the body, and he therefore suggests that it will be of advantage to give to patients suffering from this disease an increased quantity of saline material. Thus he recommends that the phosphate of sodium shall be given in the dose of thirty grains three times a day, and that subcutaneous injections of six to seven grains of chloride of sodium be used. He asserts that after the treatment there is decrease in expectoration and the objective signs of disease. This treatment is in line with that of several authors, of employing artificial serum or saline fluid in the treatment of other infectious processes. — *Indian Lancet*.

It is claimed that borate of ammonium is valuable in excessive expectoration in phthisical patients—four grains three times daily.

OTOMYASTHENIA¹—MUSCLE-DEAFNESS.

BY THOS. F. RUMBOLD, M.D.,
ST. LOUIS, MO.

In the September number of *The Laryngoscope* I gave my views concerning the functions of the tensor tympani and stapedius muscles,² stating that their functions were to select and amplify such sounds as the listener desired to hear most distinctly. I have received some letters since the publication of this article asking me to give the clinical application of the deductions contained in the full paper.

In answer I will say, in part, that with a knowledge of the functions of these ear-muscles we are able to name, with a great deal of certainty, two causes of deafness that are not generally known. One of these causes is due to a paralysis agitans of these muscles, described at some length in the paper above mentioned; and the other cause of deafness is a debilitated condition of these ear-muscles, which prevents them from selecting and amplifying sounds normally, an otomyasthenia. The fact that asthenia of the ear-muscle or muscles is a cause of deafness is intimated in the full paper. In this paper I will add enough to enable one to easily select his cases of middle-ear muscle asthenia.

This disability is not very difficult of diagnosis; in fact, the patient himself will almost invariably indicate the cause by the description of his deafness, as is plainly shown by the following, from an intelligent patient, aged fifty-eight years. He says:

"I have no difficulty in understanding you, or even in hearing my little grandson, three years old, when he is talking to me from the head of the stairs; but some persons talk in such a *mumbling* way that their words are hard to comprehend. While I am on 'Change I can't make out one word,

and I have great difficulty on the cars. If persons would speak *plainly* I could hear them very well. I can prove to you that I am not very deaf. When I go to a lecture, as soon as all are seated and the speaker gets started so as to stop all whispering, I hear him very well while I am fifty feet away from the platform. Last evening I was at a whist party; before the play commenced I could scarcely make out one word, because of the confusion made by all of them (sixteen persons) talking and laughing together. How they understood one another I don't know. As soon as quiet was restored I heard those at the other end of the room who once in a while made a remark to some one at their table, and the room was at least twenty feet long. You see I am not very deaf, but only so under certain circumstances. There is another curious thing: while I am eating I can't distinctly hear those on the other side of the table; the noise made in my mouth while I am chewing my food is so great as to drown the words, so I have to stop eating to hear them."

In the light of what was said in the paper above referred to, it will appear plainly that his deafness is due to the inability of his ear-muscle or muscles to select and amplify the sounds that he desires to hear, this disability being, in him, almost, if not quite, total—indeed, much greater than is usually observed in this class of cases.

It should be noticed that it is only while other noises are being made that he complains of the *mumbling* way in which others talk. If the other noises were not present, his hearing, while it is not good, is such that he would not for an instant think of complaining. If a person with normal ears listens to the conversation of a friend, the words of others near him seem to be spoken in a *mumbling* way. In this he resembles *exactly* the disability of the man suffering from otomyasthenic deafness, for the simple reason that his ear-muscle or muscles are not endeavoring to select and amplify the sounds of the other persons. But if this listener will turn his attention to what one of the other persons is saying—that is, selecting

¹ Ear-muscle debility.

² The article was read at the Western Ophthalmological, Otological, Laryngological and Rhinological Association, April, 1897, and published in their Transactions.

that one's words instead of his friend's—then instantly the words of his friend will seem as though spoken in a mumbling way. This is the daily experience of every person with normal ears.

When there was no necessity for selection and amplification, such as in the case of his grandson's voice, and in the quiet lecture-room, he heard with entire satisfaction, but when he desired to hear certain selected sounds, as the words of one of the company in a room full of noisy people, and not be bothered with the undesired sounds, his ear-organs were unable to perform the task. In a quiet room no one would consider this man very deaf; his statement of his ability to hear when there was no noise is ample demonstration of this.

It is evident that this variable condition of his hearing is not due to an abnormal condition of the auditory nerve, for this nerve cannot be obtuse in a noisy room and then acute the instant the noise ceases. For the same reason it cannot be due to tinnitus of either kind. Cases of this kind very seldom suffer from muscular tinnitus; if they do, it is very weak in intensity, a significant fact. Vascular tinnitus, in varying degrees of severity, is almost always present in these cases, but it can, obviously, cut no figure in causing variableness of the hearing. This proves that this condition of the hearing is due alone to the inability of the ear-muscle or muscles to select and amplify the desired sounds, a myasthenia.

There is another method of proving that asthenia of the middle-ear muscles is the cause of deafness than by that of the patient's history of his subjective symptoms; this is by the employment of the tick of the watch.¹ These patients frequently surprise the physician by the distance they can hear the metallic tick of the watch in a quiet room. This man heard the watch $20\frac{1}{8}$ R., $14\frac{1}{8}$ L. It varied a very little each time in the four or five tests that were made at his first visit. After getting his hearing by

slowly bringing the watch up to his ear until he heard it, I then slowly carried it away from his ear to ascertain if he could hear it some distance farther away, but he could not do so with either ear, even after quite a number of trials. This, I consider, proves conclusively that he is afflicted with complete otomyasthenia.

Many persons who could not hear the watch at the distance he did, namely, $20\frac{1}{8}$ R., $14\frac{1}{8}$ L., can hear the ordinary conversation of a person standing along side of them with ease in a room full of laughing and talking people, for the reason that their ear-muscles select and amplify the words of the person they desire to hear. This my patient could not do, because of the asthenic condition of his ear-muscles.

In every person with normal ears, and in all who are only partially otomyasthenic, the tick of the watch may be heard *farther* than it is heard when it is slowly brought up to the ear; that is to say, if he hears it when slowly brought up to the ear at twenty-four inches (which occurred in a partially otomyasthenic patient), the watch may be slowly taken away from the ear, and he may continue to hear it as far as to thirty or thirty-six inches, if the ear-muscle or muscles are not wearied by too long a test. It seems conclusive that the increased hearing distance demonstrates that his ear-muscles amplified the sound of the watch's tick or he would not have heard it beyond the first hearing distance, twenty-four inches.

When these ear-muscle or muscles are in a *complete* asthenic condition the will of the listener has lost the normal control over them; but, says one, these persons can hear; yes, but they are deprived of this extra acuteness of hearing, especially in a noisy place where the election of sounds they desire to hear most plainly is denied them, which, with normal ears, all persons enjoy. The proof of this is that the hearing-distance of the watch cannot be increased even by an inch beyond the first hearing-distance, it makes no difference how frequent the trials, or how slowly the watch is removed from the ear, or

¹ The louder the tick of the watch the more satisfactory the examination. A low tick shows so little difference that mistakes may be and are almost certain to be made, which will not occur with the loud ticker.

how much the listener exerts himself to hear it.

After making daily examinations of the hearing-distance in this manner during the last five or six years, with a special view to this subject, I find that otomyasthenia, in varying degrees, is by far the most frequent cause of deafness, showing the importance of understanding its mechanism.

The following is a good method of making a differential diagnosis of this kind of deafness:

While in San Francisco this summer I chanced to step into a place where the Edison phonographs were on exhibition. I was accompanied by a physician who was under treatment for complete otomyasthenic deafness. Three of the machines were so arranged that the tubes lead to one person's ears. One machine played Old Hundred, another Yankee Doodle, the third Annie Laurie. When my friend placed the ear-pieces in his ears, he heard a confusion of noises. The exhibitor said: "Listen, and you will hear Annie Laurie;" but he could not. "Well, can't you hear Yankee Doodle?" He could not. "Old Hundred is there, too." "No, sir; nothing but a confusion of noises that would drive one crazy if he listened to it very long." He could not hear any two tunes together, but instantly called out each of the three tunes as they were played singly. I then listened to the three machines, but could barely hear Yankee Doodle; when he stopped this machine I then heard Annie Laurie very well, when this machine stopped I heard Old Hundred, of course, proving plainly that I also was affected with otomyasthenia to a considerable degree. I took the ear-piece out of my right ear, and easily selected each tune with my left ear while all three machines were playing. I suffered a serious injury of my right ear in 1869, which renders me quite deaf in this ear. This accounted for my disability.

Incidentally, I will say that the subjective symptoms of otomyasthenic deafness prove that my views concerning the functions of the middle-ear muscles are correct, namely, that their office is to select and amplify such sounds as the

listener desires to hear most distinctly, showing that the ears have muscles of accommodation quite analogous to those of the eyes.

FOREIGN BODY IN NOSE; DU- RATION SEVEN MONTHS; INTERESTING REFLEX PHENOMENA.

BY PORTER CAMPBELL LAYNE, M.D.,
PROCTORVILLE, O.

I was consulted on November 18 by the parents of Master J. G. S. in regard to the child's nose. He was suffering from what they supposed to be nasal catarrh, and for such malady he had been treated for two months past by a specialist in that line.

The child was four years old and extraordinarily strong and robust for one of that age, and a casual observer would never suspect that he was suffering from anything beyond an excess of good health. The history revealed nothing more than that the child had been affected with a nasal discharge for some time past.

An examination of the nose with reflected light ended with the attempt, as the child could not be kept still long enough to get a good view of the interior of the nose; however, the cursory examination revealed the fact that the right naris was almost occluded by a grayish-white mass that looked not unlike a polyp, but for reasons stated the examination could not be completed.

It was explained to the parents that it would be necessary to give an anesthetic to secure a satisfactory examination, which was readily acquiesced in, and the next morning I called at the home prepared to remove what I thought to be a polyp.

On entering the house the mother said to me: "Doctor, I have just thought of something that may throw some light on the nature of this case. It is this: Last May, while planting flower seed, among which were some 'Jack-beans,' James came running to me and said that he 'had a bean in his nose,' but as we could not see it and as it produced no

immediate trouble it passed from our mind and nothing more was thought of it."

This was a point to be considered, yet it seemed almost incredible to believe that a bean could remain in the nasal fossa for seven months without producing greater disturbance than a slight muco-purulent discharge.

While carefully observing the boy it was noticed that he manifested some peculiar nervous phenomena, to which my attention was directed, and which were as follows: While at rest (sitting or standing) there occurred at varying intervals irregular choreiform movements of the upper and lower extremities; at the same time there occurred several rapid blinking movements of the eyelids; but the most noticeable feature observed was a double spasmodic torticollis, which accompanied the preceding movements.

These spasmodic movements did not last long, and occurred several times during the day, twice while under my observation. When the symptom was first observed it appeared as if the child was voluntarily forcibly flexing the neck, but the history and subsequent examination dispelled this belief. The father informed me that the condition had only been present since the child had complained of its nose troubling it.

Chloroform was now administered by my colleague Dr. Adkinson, and after exposing the right anterior naris a grayish-white mass the size of a small filbert and covered with detritus and muco-purulent secretion came into view; it presented the appearance of a broken-down gangrenous polyp, and would have deceived the eye of the most experienced. Examination with the probe showed that it had no attachments, and with a suitably bent probe and pair of forceps the offending body was easily extracted and proved to be the long lost "Jack-bean," enlarged to about four times its natural size.

The bean in the dry state is quite similar in size and shape to an ordinary buckshot; it has a thick brownish-gray cortex, with an interior of exceedingly firm consistence. The beans in this case were old and dry and much firmer

than usual, and were probably dead, as none that were planted grew.

The fact that the bean was dead may explain why the local symptoms were not more marked after seven months' habitat in the right nasal fossa, yet on removal it was quite firm and had not undergone very great softening.

The nervous symptoms, on the other hand, were clearly marked, and is the first instance, as far as I can ascertain, where a foreign body in the nasal fossa produced a paroxysmal, spasmodic, double torticollis.

Evidence is not wanting to prove that foreign bodies in the nasal fossæ, and more so intra-nasal operations, may be followed by peculiar reflex phenomena, especially throughout those portions of the body innervated by the fifth nerve and its branches.

In the *Medical News*, of October 9, 1897, occurs a very interesting paper by Dr. Francis R. Packard, of Philadelphia, on "Amaurosis Following Intra-Nasal Operations, with a Review of some of the Uncommon Results of Operations within the Nose," and as the paper is not foreign to my subject I shall take the liberty to quote some of his statements.

The complications that may follow intra-nasal operations are classified by Lermoyez as follows:

"1. *Of infectious origin*.—Diffuse rhinitis, submucous abscess, diphtheria of the wound, conjunctivitis, otitis media, tonsillitis, facial erysipelas, meningitis, arthritis, pyemia, unclassified infections, post-operative scarlatina, awakening of certain diatheses.

"2. *Of nervous origin*.—Neuralgias, migraines, syncope and vertigo, visual disturbances, asthma, laryngeal spasm, exophthalmic goitre, general depression.

"3. *Mechanical origin*.—Hemorrhage from the nose and permanent reddening of the nose."

Under the two latter classifications come most of the cases detailed; as, for example, exophthalmic goitre, asthma, permanent reddening of the nose, sudden and temporary loss of vision, persistent sneezing, laryngeal spasm, edema of the eye-lids and conjunctiva, most of which followed galvano-cauterization of the

nasal mucous membrane, and were due to contraction and pressure of the resultant scar tissue, as was proved by the disappearance of the symptoms on subsequent removal of the cicatrices.

It is plain how a foreign body tightly impacted in the nasal fossæ would, by pressure, exercise very nearly the same influence as an old cicatrix, and this is probably what produced the symptoms in the present case.

The only case cited by Packard that bears a close resemblance to that of the writer's is one by C. H. Knight (*American Medico-Surgical Bulletin*, 1894, Vol. vii, p. 348), in which, after the removal of adenoids from the nasopharynx of a delicate girl nine years old, she developed well-marked torticollis that lasted ten days.

In the present case the symptoms subsided immediately following the removal of the foreign body, and have never manifested themselves since.

The case is worthy of consideration from the following points of view:

1. It emphasizes the vast importance of making a careful examination of the upper air passages in all children affected with laryngeal spasm, chorea, visual disturbances, torticollis and closely allied conditions.
2. The length of time which a foreign body may remain in the nasal passages without producing great local disturbance.
3. The great liability to mistake the foreign body (especially a pea or bean), if it has remained long within the nose, for a polyp undergoing ulceration.
4. That our knowledge of the reflex process within the organism is in many cases lacking that scientific elaboration which the subject merits.

Fever and High Pulse in Infants.

Graham (*Dunglison's College and Clinical Record*, December, 1897) points out that a high pulse-rate or a moderate amount of fever in an infant does not necessarily mean serious illness unless kept up for some time. Slight causes are sufficient to produce marked circulatory and temperature disturbances.—*Medicine*.

SYPHILIS OF THE RECTUM.

BY GEO. J. MONROE, M.D.,
LOUISVILLE, KY.

I was called some ten days ago to Huntington, W. Va., to see Mr. H. C.; was called by Dr. Vickers. I found the gentleman in the following condition: Very weak; very much reduced in flesh, from weighing 170 pounds he only now weighs ninety-nine. Examined him thoroughly; found the glands of the neck very much swollen. Tried to trace scrofula in the family, but could not. He was having from fifteen to twenty actions of the bowels daily. I noticed the actions were mixed with blood, pus and mucus. I then gave him chloroform and made an examination in order to decide where the pus and mucus were coming from. I found an enlargement corresponding with the sigmoid flexure. I found on introducing rectal speculum an indurated condition of the rectum amounting to stricture about three and one-half inches from the anus. This, I think, corresponds with Bodenhammer's third sphincter. I have always denied a third sphincter in the rectum, but am becoming doubtful about my conclusions. The gut seemed to be surrounded with a cheesy mass, closing the calibre of the rectum to quite an extent. This infiltration I found also at the verge of the anus. Although I had had the rectum emptied, when I introduced my finger into the rectum there was about two ounces of fecal matter combined with pus, mucus and blood, discharged. I allowed all that was in this pouch to escape. I then pressed my finger higher, when more of the same substance exuded. I withdrew my finger and inserted a dilating speculum, when at least a pint of feces, pus and mucus escaped. The stricture was not so contracted but what I succeeded in getting my index finger through it. It seemed to be more an infiltration of the parts than an absolute stricture. Hoping I had reached the limit of the trouble, I passed a Wales' rectal bougie into and even above the sigmoid flexure, when there was another

copious discharge of mucus, pus and fecal matter. I diagnosed the case rectal syphilis. I now examined the penis and found the old scar, which proved to me our patient had had an old-fashioned Hunterian chancre. I put patient upon the following: Horlick's malted milk, Kellog's granose flakes, Armour's extract of beef, raw eggs and cream. The medicine was as follows:

℞ Subnit. bismuth, . . . ʒi
Sodæ phosphate, . . . ʒj
Carbolic acid, saturated
solution (Calvert's), . . . gtt. xxx
Camph. tr. opti, . . . ʒi
Elixir lactopeptine, . . . ʒij

M. Sig.—Shake well and take two teaspoonfuls three times a day.

℞ Maltine and syr. hypophosphites.

Sig.—One dessertspoonful three times a day.

Anoint surface, rubbing in thoroughly cod-liver oil once a day.

Mercurial ointment rubbed in over sigmoid flexure and loins, alternately, once a day.

Once a day pass Wales tube No. 6 up to sigmoid flexure and inject hydrastis canadensis, ʒi; aqua, ʒss.

Also introduce rectal speculum and swab lower four inches of rectum, first with Oakland's dioxide of hydrogen; secondarily with hydrastis canadensis, full strength, once a day.

The doctor writes me the patient is better. Only four or five actions in twenty-four hours. Feels stronger and more satisfied.

I may here state that I ordered patient to eat the juice of three oranges a day. Cut the orange in two, take out all the seeds, put a little sugar upon each half, use a spoon in getting the juice; eat none of the pulp. I also encouraged patient in the idea that he might recover. I am satisfied we treat this class of patients with more idea of success than we do if they are altogether discouraged.

DR. D. E. HAAG has been chosen dean of the Toledo Medical College, Toledo, O., to succeed the late Dr. J. H. Pooley.

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DR. J. C. CULBERTSON,
317 W. SEVENTH ST., CINCINNATI, O.

CINCINNATI, JANUARY 8, 1898.

Editorial.

OTHER OCCUPATIONS.

A young man after graduating in medicine, fresh from college, hospital and books, has had little time to give to other themes of thought aside from the one study which is to be his life-work, and very naturally the momentum of gathered forces keeps him right along in this channel. Medical studies and interest in them should be kept up, but not to the neglect of all else. The world is a very wide one, and there is very much in it besides the wisdom of medical lore. With good judgment a young man does well when he takes a peep into other pastures, where he may be able to sow and reap other treasures of knowledge.

A favorite side-study of physicians has been, and must continue to be, in natural science. This is so nearly related to medicine that the educated physician is soon quite at home in its realms, and it is here that some have not only found a vast amount of pleasure and personal satisfaction, but through trained habits of investigation many a

doctor of medicine has become an eminent man in the by-ways of natural science.

In this city some of the best and most favorably known physicians have been intimately identified with studies of birds, fish, game, geology, conchology; others have been noted as musicians, educators, artists, horticulturists and mathematicians.

The education of a young man in medicine is an excellent preparation for an engagement in any of these occupations. A reason for this may be found in the fact that they are well trained as observers of phenomena, and close logical reasoners as to causes, conditions and results.

Such studies are to be commended and never deprecated. An entrance upon them has a natural tendency to broaden the intellect of any man, and broad-mindedness, coupled with a culture that belongs to mentally well-equipped men, gives to the country its most useful citizens.

The writer takes the liberty of mentioning some names of physicians who have attained more than local repute in these lines: Langdon among the birds, Young with the finny tribes and native wild game, Norton in music and botany, Miller in conchology, Forchheimer and Wenning in music, Dawson and Carson were famous fishermen, Howe with animals and birds, Ray as an educator, and others, none of whom lost caste or were less thought of as physicians because of these side-lights in which they chose to do some special work. In fact, they were better men and better physicians because of these very studies.

There is such a thing as narrowing or contracting the mind of any man by a continuous line of thought carried on in one direction for several years. A physician should know something besides medicine, and know it well. The

list of collateral sciences is not a limited one, and the doors of entrance are always invitingly open.

There are other occupations such as belong to the commercial world and are purely money-making in character; these detract from the professional character of a physician, because of the tendency which will crop up and make a man think of his profession as a money-making trade. Such occupations, when entered upon by physicians, drag him down, and seldom or never build him up in a professional career. For this reason they should be avoided unless medicine is to be abandoned.

PATERNAL GOVERNMENT.

This is either despotic or monarchical, and is not in consonance with republican or democratic forms.

In the former dependence of the individual is taught; in the latter independence of thought and action are cultivated. In the former, man is trained to absolute obedience to the King and his official household and to believe in the divine right of kings; in the latter every man is a sovereign, having equal personal rights in all points in the eye of the law.

One narrows the intellect of the individual and merges it into the will of the king; the other develops and widens the mind and makes of every one a thinker and care-taker of himself.

The one necessitates a large standing army for the purpose of holding a free expression of opinion in abeyance; the other has few soldiers, and little need of any.

In the one an order issued is with a mandate of authority; in the other there may be some question as to whether such an order is obligatory or not.

In one there is a cultivation of the highest type of independent manhood; in the other a subservient dependence upon the care of the government, and the king as its lawful representative.

In our American Republic some monarchical conditions are ever and anon found to crop up, and this particularly in municipalities. Some of these conditions are inimical to the very best interests of the people, although founded upon the best of motives. In this proposition it will be found that members of the medical profession are sufferers to a greater extent than most others.

In this city, more than half a century ago, there was established a system of so-called ward or district physicians, which has been handed down from one administration to another with very little change, in which a small salary or stipend was given to the ward physician for his visits to the poor of his district. In some instances the plan has worked well, at least seemingly, for the poor and for the doctor; in others not. There are always those who endeavor to live by their wits, and turn those wits into an effort at obtaining medical services for nothing when quite able to pay. The doctor does not like to refuse, for these people represent votes, and may be a means of displacing him. For a time the office may be a good one for a young man just starting, but only for a few months, because those who are independent do not care to have the stigma of employing the charity doctor. Furthermore, with a certain class the system tends to a cultivation of poverty methods. Then, again, doctors have certain rights which are inalienable in the prosecution of business, and these rights should not be curtailed or given up without a struggle. In fact, the battle in professional life

for bread and butter has become an exceedingly close one.

Cincinnati has for its Health Officer a gentleman of very superior attainments, and whose purity of motives can not be successfully questioned by any one. In his zeal for a protection of the health and lives of the people he has recently issued instructions for a free distribution of certain remedies, and notified the medical profession that his department was ready to make confirmation diagnoses, and would even go further by keeping certain sufferers from contagious disease under official surveillance. Nearly all of this smacks of paternal government methods to a degree that is offensive and antagonistic to the interests of the general practitioner of medicine. It is quite well known that physicians are hard pressed in business, and this turn of an additional screw works a hardship. There are scores of men who are anxious and glad to make microscopical examinations for a small fee, and there is no valid reason for taking this business out of their hands officially, and it should not be done.

For those who are in actual poverty any physician will give his services or point to a young professional friend who will. The system of district physician and hospital methods are the very greatest cultivators of pauperism that can be found; they are not excelled by the dram-shops; while this supplemental work inaugurated by the Health Officer tends in the same direction. Medical men have been only too free in tendering their services for sweet charity, and there are those who thrive upon such alms-giving service. These are men of genius, and are not to be numbered along with the hundreds of others who do not possess their hoodoo faculty.

To stamp out and prevent disease is

the very highest function of the cultured physician, and he will be found ever ready to adopt and coöperate to that end; but to ask him to generously turn over his business to another when he needs it himself is asking a good deal.

In some immoral communities it has been said, "It is a wise child that knows its own father." It may now be said in all cities that it is a wise physician who knows his own patients, for they may be in the hands of another, and that through the paternal administration of the government.

Reputable practitioners of medicine have inalienable rights, which should not be taken away from them by police patrol wagons, hospital drummers or health office mandates.

Think of it a little bit, and see where you are at.

EDITORIAL NOTES.

STATE AND LOCAL BOARDS OF HEALTH OF OHIO.—The eighth annual meeting of the State and local boards of health of Ohio will be held in Columbus, Thursday and Friday, January 20 and 21, 1898. All sessions will be held in the Y. M. C. A. Building, on Third Street opposite the State House.

PROGRAMME.

Thursday, January 20, 1 P. M.

Opening Remarks by the President. Dr. Thos. C. Hoover, President State Board of Health, Columbus.

The Prevention of Milk Communicable Diseases. Dr. C. A. Bonner, Health Officer, Dayton. Discussion.

The Methods for the Examination of Milk. Dr. B. Stanton, Member of State Board of Health, Cincinnati. Discussion.

The Present Position of Formaldehyde as a Disinfectant. Dr. C. O. Probst, Secretary State Board of Health. Discussion.

Discussion of questions proposed by delegates.

Evening Session.

The Evil Results of Present Educational Methods. Dr. S. P. Wise, Ex-Member State Board of Health, Millersburg. Discussion.

The Bacteriological Diagnosis of Diph-

theria. Prof. A. M. Bleile, Ohio State University. Discussion.

Inventors and Manufacturers of Health. Josiah Hartzell, Ph.D., Member State Board of Health, Canton. Discussion.

Discussion of questions proposed by delegates.

Friday, January 21, 9 A. M.

Should Typhoid Fever be Quarantined? Dr. J. C. Crossland, Member State Board of Health, Zanesville. Discussion.

What Can Boards of Health Do for the Prevention of Consumption? Dr. J. M. Withrow, Health Officer, Cincinnati.

County Health Organizations. Dr. Edwin Le Fevre, Health Officer, Sidney. Discussion.

Discussion of questions proposed by delegates.

REPORT OF THE HEALTH DEPARTMENT OF CINCINNATI.—Following is the statement of infectious and contagious diseases for week ending December 31, 1897:

	Cases.	Deaths.
Measles.....	6	1
Diphtheria.....	8	3
Scarlet Fever.....	14	..
Typhoid Fever.....	3	2
Phthisis Pulmonalis.....	10	15
Membranous Croup.....	4	1
Pertussis.....	9	..
Total.....	54	22

The mortality report for the week ending December 31, 1897, is as follows:

Croup (membranous).....	1
Diphtheria.....	3
Measles.....	1
Typhoid Fever.....	2
Other Zymotic Diseases.....	4—11
Cancer.....	2
Phthisis Pulmonalis.....	15
Other Constitutional Diseases....	9—26
Apoplexy.....	1
Bright's Disease.....	2
Bronchitis.....	8
Convulsions.....	1
Gastritis and Gastro-Enteritis.....	1
Heart Disease.....	9
Meningitis.....	2
Nephritis.....	2
Peritonitis.....	1
Pneumonia.....	15
Other Local Diseases.....	18—60
Deaths from Developmental Diseases..	11
Deaths from Violence.....	7

Deaths from all causes.....	115
Annual rate per 1,000.....	14 76
Deaths under 1 year.....	14
Deaths from 1 to 5 years.....	13—27
Deaths during preceding week.....	102
Deaths corresponding week 1896.....	121

Deaths corresponding week 1895..... 131
Deaths corresponding week 1894..... 111

ST. LOUIS LARYNGOLOGICAL AND OTOLOGICAL SOCIETY.—On December 27, the St. Louis Laryngological and Otological Society was formed, composed of those physicians of St. Louis who limit their practice to the treatment of diseases of the nose, throat and ear. Dr. J. C. Mulhall was elected President, Dr. J. B. Shapleigh, Vice-President; Dr. F. M. Rumbold Secretary, and Dr. A. S. Barnes, Jr., Treasurer, for the year 1898. Meetings will be held monthly, and it is expected that the scientific programme furnished will be highly interesting and instructive. While the membership is limited, the privilege of inviting professional friends is reserved by each member.

PUBLISHER'S DEPARTMENT.

Confidence Well Placed.

December 6, 1897.

JOHN CARLE & SONS,

New York City.

Gentlemen: You can be assured that I will prescribe the IMPERIAL GRANUM, whenever there is an indication for a prepared food, because I had sufficient confidence in it to give it to my own child, and it agreed with him perfectly, and he has increased in size and weight to an astonishing degree.

— M. D.

Physicians can obtain samples of this celebrated prepared food free, charges prepaid, on application.

DELAYED LABOR.—In that common class of cases of delayed labor in which no mechanical obstacle exists to delivery, various remedies are recommended to either intensify the pains or to subdue them for the time being, until, after a refreshing sleep, the patient has regained her strength. According to the character of the pains, therefore, the administration of oxytocics or sedatives and hypnotics is indicated. Dr. J. F. Edwards, of Philadelphia (*Daily Lancet*), has recently offered the following valuable suggestion for the treatment of cases of delayed labor:

"A single dose of twenty grains of phenacetine has done us yeoman service in simple uncomplicated cases. A patient with a neuralgic tendency gets far more relief if one-third or one-half a grain of morphine be given with it—by the mouth, of course. This rarely fails either to change the character of the pains for better or stop them for a time. In the latter event, she generally sleeps awhile and wakes refreshed; the parturient process, interrupted, begins at once; abnormal conditions do not occur, and the labor terminates in a comparatively short time. If the heart's action be feeble a few grains of caffeine added to the dose might tend to prevent undue depression from the coal-tar product."

Selections.

FROM CURRENT MEDICAL LITERATURE.

Strapping the Chest in Pneumonia.

Solberg is reported in the *Deutsche Med. Zeitung* of August 5, 1897, as using, in a case of pneumonia with severe pain in the side in which he could not resort to the injection of morphine, a strip of adhesive plaster, and the result was surprisingly prompt, as in cases of fracture of a rib. He has since employed the plaster in six other cases of severe pain in the side occurring in the course of pneumonia. In four of them, in which the inflammation was in the lower lobe, the improvement was notable. In another case, in which the "stitch" was really in the scapular region, alleviation was effected by applying the strip of plaster directly beneath the axilla. In the sixth case, in which the "stitch" was not severe and the strip was removed at the end of a day because the patient felt a little constrained by it, it was again applied at the patient's request. Even the dyspnea and the cough seemed to be mitigated, according to Solberg's observation and the patient's own statements. The strip used was of American adhesive plaster, not more than an inch and a half wide, applied as in cases of fractured ribs.—*Medicine*.

Saline Infusion in Cases of Suppression of Urine After Surgical Operation.

McBurney (*Annals of Surgery*) has reported to the New York Surgical Society a case of suppression of urine after operation for the removal of a large calculus from the right kidney, in which the patient, a man, aged fifty, recovered after the injection into a vein of the arm of a quart of salt solution. The operation on the kidney was attended with but moderate bleeding, no ligature and no packing having been required for its control. In the course of the next twenty-four hours nausea began, and was soon followed by vomiting, headache, and symptoms of uremic

poisoning. There was no voluntary discharge of urine, and only four drachms were obtained by catheter during the first twenty-four hours after the operation. The saline infusion was followed in the course of a few hours by the discharge of thirty-four ounces of urine, and the patient steadily recovered.

In the discussion on this report reference was made to a case of total suppression of urine after an operation for gangrenous hernia, in which striking improvement had followed similar treatment. It was also pointed out that Dickinson had, in the *British Med. Journal*, called attention to the fact that patients could be aroused from diabetic coma in a few minutes by saline infusion.—*Indian Lancet*.

Ichthyol in the Treatment of Affections of the Respiratory Organs.

Le Tanneur (*Journal de Médecine de Paris*, October 17, 1897) has employed this remedy extensively in a variety of affections, and has found it especially useful in the treatment of pulmonary tuberculosis, dry and purulent catarrh of the bronchi, and also dilatation of the bronchi with profuse fetid expectoration.

The only form in which the drug is acceptable to the stomach is capsules, which should be surrounded by gluten envelope in the hope that they will pass through the stomach and be absorbed from the intestine. Each capsule should contain 0.25 centigrammes. Most of his patients received from eight to twelve capsules per day. He did not notice any disturbance of digestion, though some patients continued to take this dose for a period extending over fourteen months.

In the treatment of bronchial catarrh Le Tanneur found that it made the secretion more fluid and that it was consequently expelled with a less degree of effort. He also noticed a revulsive effect, a decrease of the congestion, and a return of the bronchioles to their normal size. An antiseptic effect was also noted which diminished the absorption of toxins and consequently lessened the systemic infection. Especially in that form of catarrh accompanied by

dilatation of the bronchioles he noted a very rapid improvement in all the symptoms, and he regards the action of the drug in these cases as quite as efficient as it is in tuberculosis.—*Medicine*.

Regulation of Slaughter-Houses.

Dr. Ch. Wardell Stiles, in a thoughtful consideration of the country slaughter-house as a factor in the spread of disease (*Med. and Surg. Reporter*), summarizes the subject as follows:

1. A well-regulated system of slaughter-houses is as necessary to the public health as is a well-regulated system of schools to the public education.

2. Every slaughter-house is a centre of disease for the surrounding country, spreading trichinosis, echinococcus disease, gid, wireworm and other troubles caused by animal parasites, and tuberculosis, hog cholera, swine plague and other bacterial diseases.

3. The important factors in spreading these diseases are offal feeding, drainage, rats and dogs.

4. These diseases may be gradually held in check and in some cases entirely eradicated in two ways:

First, by a reduction in the number of premises on which slaughtering is allowed, on which account it is urged as all important that there be a segregation of the slaughter-houses, so that all the butchers of any given town will be compelled to do all their killing in a common inclosed and restricted area. In abandoning slaughter-houses care should be taken to destroy the rats, in order to prevent the spread of infection. Second, by regulating the factors concerned in spreading the diseases; (a) offal feeding should be abolished; (b) drainage should be improved; (c) rats should be destroyed; and (d) dogs should be excluded from slaughter-houses.

5. A licensing of slaughter-houses by the State boards of health and the employment of an assistant State veterinarian, whose sole or most important duty shall be a sanitary supervision of all places where animals are slaughtered for food, are necessary.

6. The appointment on every local board of health of a competent veterinarian, whose duty it shall be to control the class of meat placed upon the block, is urged. All meats should be inspected at the time of slaughter, thus securing for the local consumer the same guaranty that the national government provides for the foreign consumer and for inter-State trade.

7. The prohibiting of the raising of any kind of stock within the premises of slaughter-houses is advised, as are also State regulations to the effect that when a stock animal (horse, of course, excepted) once enters the premises of a slaughter-house it must never be allowed to leave those grounds alive, but must be slaughtered within two weeks' time.

8. It is advisable to use more substantial building material in the construction of slaughter-houses.

9. The country slaughter-house is more injurious to the farmer than to other classes, as he is less able to meet the dangers involved, and on this account he is urged to take the initiative in calling for a better regulation of places of slaughter.

10. When a farmer kills stock for his own use he should burn or bury the offal, or cook it in case he feeds it to hogs.—*Med. Standard.*

Treatment of Spasmodic Wry Neck.

At a meeting of the British Orthopedic Society, held in London on Friday, November 5, Mr. Noble Smith read a paper upon this subject. Out of eighteen cases which he had treated he had operated upon eleven by excision of a piece of the spinal accessory nerve, and in eight of these cases he had also had to operate upon the cervical nerves. In all the eight patients he had removed portions of the second, third and fourth external branches of the posterior cervical nerves. In the three cases in which he had not performed this latter operation two of the patients were for the present sufficiently contented with the results obtained by division of the spinal accessory alone. In the third case, although the sterno-mastoid was abso-

lutely paralyzed by the first operation, the patient said she did not realize any benefit, and could not be persuaded to submit to a completion of the treatment by operation on the posterior cervical nerves, but it was stated that this patient had firmly made up her mind before anything was done that no treatment would relieve her. Mr. Noble Smith contended that considering the almost uniform success of the double operation this treatment could now be considered as a well established and trustworthy method.—*Med. Press and Circular.*

Gonorrhea in Married Women.

Van Schaick, in the *N. Y. Medical Journal*, says that the conclusions of Noeggerath as to the importance of gonorrheal infection have been fully confirmed. Three years ago he began the investigation of cases of married women suffering from vaginal discharge. In each instance cover-glass slips were made and stained with methylene blue. Whenever gonococci were not found subsequent examinations were made, at least three times, whenever it was possible, and in several patients it was only at the second or third examination that the gonococci were discovered.

The writer examined in this manner, during a space of very nearly three years, sixty-five women. Of these, four were examined again at an interval of at least a year, and two were examined again after an interval of two years and over. He thinks the result of his examinations does not represent an absolutely true statement of the condition of things. Cases of gonorrheal infection must certainly have escaped notice. Most women take copious douches before coming to the office, and thus wash out the parts more or less completely, and in many cases gonococci are imbedded in the tissues, and for this and other reasons escape detection. Yet such evidence as he can present is positive.

All of the women seen complained of leucorrhea, and in three only was there any evidence of an acute gonorrheal infection from the appearance of the vulva, such as to lead to an instant diagnosis of gonorrhea. In others the

character of the discharge and the appearance of the parts simply led to suspicion, which was generally confirmed with the microscope. In four instances the patients declared that they were aware that their husbands had "something the matter" with them.

Among the sixty-five women examined he found gonococci seventeen times, or 26 per cent. of the cases. Nineteen women were examined twice, and in three gonococci were found at the second examination. Thirty-two were examined three times, and in three of these the third examination revealed the cocci.

These results tend to show that gonorrhea is a more common disease among married women than is generally believed. They prove the utter futility of mere inspection in making the diagnosis of the disease, and the uselessness, so far as gonorrhea is concerned, of the inspections made in countries where the social evil is partially regulated by medical control. This, however, is now everywhere fully recognized, and the necessity for microscopical examinations has been urged repeatedly.—*Charlotte Med. Journal*.

The Treatment of Chronic Deafness by Thyreoidine.

Hr. Broch, at the International Congress on Epilepsy, said that recently thyreoidine had been used in chronic deafness, the so-called sclerosis of the aural passages, an affection the cause and nature of which were still dark. The treatment was stumbled upon by observing that when thyreoidine was given in myxedema any loss of hearing power participated in the improvement. It was the more readily taken up as all possible therapeutic methods had hitherto been without avail. He had been led by the literature of the subject to put the remedy to a test, and had treated forty cases by thyreoidine. They were people from eighteen to forty-seven years of age, in whom all the known methods of treatment had failed. He had used the English preparations, only using the German in two cases for the purpose of checking the effect after the course of treatment was terminated.

The dose was one tablet three times a day. In one case, that of a woman who took by mistake three tablets at once, the treatment had to be stopped owing to acute thyreoidism. Also in a nervous, corpulent lady it had to be stopped on account of disagreeable by-effects. He observed no effects whatever from the treatment, and believed the good reports from others depended on subjective deceptions and errors of testing the function.—*Berlin Cor. Med. Press and Circular*.

The Etiology of Infantile Convulsions.

Dr. Frank Dyer Sanger, after an extended discussion of the various causes which may produce convulsions, and a review of the theories which have been advanced regarding them, reaches the following conclusions:

1. Convulsions are most frequent under two years. There are two periods of frequency—under one month and between six months and two years.
2. The nature of the nerve reaction resulting in a convulsion is not understood, but it is probable that instability of nervous tissues at this period of life favors this reaction.
3. Convulsions are frequently observed in adult life, and result from auto-intoxications and other causes.
4. Convulsant substances may be introduced from without or generated within the economy: (a) Substances useful to the economy, if they accumulate, become harmful—for instance, water, carbonic acid, mineral substances, the salts of biliary acids, soluble ferments, toxins not ferments in saliva, alkaloids of secretion in urine; (b) infectious agents may elaborate toxins; (c) organisms constantly present in the economy under certain circumstances may become infectious agents.
5. The instability of all the organs and tissues of the infant economy makes auto-intoxication common.
6. Convulsions occurring in rachitis and diseases associated with great nutritional disorders; all forms of gastrointestinal disorders; the acute infectious fevers—are most readily explained on the ground of auto-intoxication.

7. Convulsions resulting from marked disturbances in the respiratory and circulatory systems, as, for instance, asphyxia and hemorrhage, are in all probability toxic.

The reflex origin of convulsions is probably not common. It should, however, be noted that when the so-called convulsive habit is established reflex disturbance may bring on a spasm.—*Med. Standard.*

Peronin.

Stampfl, at the Medical Club, made remarks on peronin, which he said was a substitute for morphia, and was admirably suited for all larynx and lung affections where the cough was troublesome. Reflex vomiting after attacks of coughing and pain were quite relieved with a reduction in the expectoration.

In neuralgia, when not too severe, peronin was of great service.

It was also beneficial in chronic bronchitis and congesting catarrhs.

It produced a sort of itching on the skin from diaphoresis, although the latter is not constant.

On the latter account it is contraindicated in phthisis internally or as insufflations for throat affections. The dose is two to three times the quantity of morphia.

In the discussion Stampfl was asked what effect the drug had on the heart. He could not give any guarantee beyond his own experience and Schrötter's clinic, where no untoward cases of this kind were observed. He had also used it freely among children without observing any bad effects. Another property of the drug was its freedom from causing any constipation.

The dose was 0.02 gramme and should not exceed 0.06 gramme. The daily amount varies between 0.15 gramme and 0.2 gramme.—*Vienna Cor. Med. Press and Circular.*

Tubercular Peritonitis.

In an article on this subject, Holmes arrives at the following conclusions (*Annals of Gynecology*):

1. Tubercular peritonitis is a relatively common disease.

2. It is never a primary disease,

though it is usually impossible to find the initial focus.

3. Recovery follows laparotomy, as a general rule, unless there is an initial focus to keep up the disease.

4. This disease appears in three different forms—the exudative form, the dry form, and the ulcerative form—and they are recognizable in the order named.

5. Microscopical examination of the peritoneum is sufficient for a positive diagnosis. The demonstration of microscopical tubercles, or the recognition of the bacilli are only confirmatory.

6. Puncture of the abdominal wall for diagnosis or for the removal of ascites and injection of air, fluid or iodoform, is dangerous and should not be practiced.

7. Laparotomy, with iodoform gauze tamponade drainage, is the safest and most reliable treatment.

8. Laparotomy should be done as soon as there is a show of emaciation or when a relative diagnosis has been made.

9. A positive diagnosis can never be made before laparotomy.

Chloro-Anemia in Boys.

It is well known that chlorosis in the male sex presents but rarely that pale waxy color special to the feminine sex, as the number of red corpuscles diminish but slightly. The phenomena observed in such cases are generally those of general lassitude and anorexia or gastric disturbance. Besides the patients complain of palpitations and oppression. Consequently this affection is frequently confounded with other morbid conditions, and especially neurasthenia. Careful investigation, made by Dr. Molle, has, however, proved the existence, in masculine chlorosis, of a constant phenomenon, that of venous soufflé in the femoral veins. To discover this sign our confrère proceeds as follows:

The patient being placed in the horizontal position, the legs extended, the stethoscope is placed over the point in the inguinal region where the beating of the artery is felt. He presses hard on the instrument so as to hear the thrill-like murmur of the blood wave against

the walls of the artery, and then he diminishes slowly the pressure until the thrill disappears, and it is at this moment that venous souffle is heard similar to that heard so frequently in the jugular veins.

Dr. Molle could never find this femoral souffle in manifestly chlorotic girls.

In writing on the subject, I may say that a similar phenomenon can be almost always found in chlorosis of the gentler sex by placing the stethoscope directly on the eyeball. The sign is very characteristic and interesting to observe.—*Paris Cor. Med. Press and Circular.*

Treatment of Eczema.

Thompson, in discussing this subject, says:

Take care that all internal and external causes for tracheal irritation are removed, if possible, and the urine examined carefully for albuminuria, phosphaturia, oxyluria, glycosuria, or polyuria, occurring in the course of such diathetic condition as lithemia, gout and diabetes. Have patient as much as possible in the open air, eat regularly of easily digested foods, the proteid constituents of which should be present in comparatively small amounts; and fresh vegetables are useful, such as the various salads, cresses, and similar substances. With eczema in the new-born, great care should be paid to the regularity of nursing and the clothes, particularly the diapers; and, also, as to healthy surroundings.

Purgatives have been much abused by the physicians of earlier times in the treatment of eczema, but their moderate use, should constipation be present, is an absolute necessity. At first calomel may be given in small doses, or some of the neutral salines, or castor oil, or the preparations of senna. As diuretics it is well to employ some of the alkaline mineral waters, and to use, to a great extent, a milk diet. Belladonna is sometimes useful in cases of eczema in which there is a profuse sero-fibrinous exudate. Under these circumstances two to ten drops of tincture of belladonna may be

taken quite frequently.—*Charlotte Med. Journal.*

PHTHISIS: WINTER COUGHS.—The treatment of phthisis, or pulmonary tuberculosis, is ever of interest to the practitioner of medicine; at this time of the year especially so. Like the poor, "it is always with us." So many specifics for this affection have from time to time been heralded to both the profession and the public that it is doubtless true that thousands of human lives have been sacrificed while demonstrating their worthlessness.

It has time and time again been proved that the best results in this disease can be attained by the use of what I may term "standard" remedies, and not in the waste of time required in experimenting with serums and other impositions on the medical fraternity.

Prominent among the standard remedies referred to, stands one that may with truth be called "Nature's Own Remedy," inasmuch as it is obtained from the very bowels of Mother Earth—petroleum.

The Angier Chemical Co., of Boston, have placed this remedy in our path in palatable form, combining with it the well-known hypophosphites. This emulsion supersedes cod-liver oil in more ways than one, not the least of which is that it is palatable, consequently does not disorder digestion or produce nausea. This in many cases is of the greatest importance. In regard to its therapeutics, it may be said that it is antiseptic, antispasmodic, stimulant, diaphoretic, nutrient and expectorant. By its use the cough is at once ameliorated, the perspiration is diminished, the patient is strengthened, thereby enabling him to expectorate the loosened mucus with greater ease; fetid odors are made less so, and frequently the consumptive steadily improves and regains health. In the first stages of this disease it is certainly curative, as can be verified by any practitioner giving it a faithful trial.

In the commoner coughs, often spoken of as winter coughs, even when not of tubercular origin, and also in bronchitis, Angier's Petroleum Emulsion is invaluable. Here it exerts the same action on the cough, expectoration and mal-nutrition as in the former conditions, and other medication is rarely required. In the vague and ill-defined chest pains of those recovering from an attack of pneumonia, pleurisy or gripe this preparation is specially indicated. The improvement in digestion which always follows its use is one of its prominent features, and it is therefore also adapted to all forms of mal-nutrition in old and young.

It is not my purpose in this paper to quote particular cases treated, but simply to direct attention to Angier's Petroleum Emulsion of those who may not have learned of it, and especially to those physicians who are prescribing cod-liver oil, but who desire something more efficacious and more acceptable to the patient's palate and stomach.

J. D. ALBRIGHT, M.D.,
Pottsville, Pa.

Translations.

PARISIAN MEDICAL CHITCHAT.

BY T. C. M.

Doctors of Beauty—The Education of the Eyes—The Improvement of the Nose—The Training of the Neck and Chin—The Refinement of the Lips—From Beauty to Monstrosity—Camille Daresté, the Pupil of Geoffrey Saint Hilaire—The Manufacture of Monsters.

The cult of beauty inspired ancient poets; in our more practical times it has given rise to several small but interesting industries; thus in Austria, and even in France, organizations of young women compete for honors and gold medals, and honorable mentions are bestowed. These competitive feminine exhibitions are honorably conducted, too.

In America it is said they even do better, for they have added to the worship of Beauty the culture of the beautiful. There they polish the rough diamond that nature has so generously given to the body of woman.

"Academies of Beauty" have been founded at New York and St. Louis, where pupils of a new kind are admitted. There they teach women the art of being beautiful, or rather the art of drawing out their beautiful points. This is a scientific undertaking that interests medicine as well as esthetics.

Madam Alberti, the head and front of the New York "Academy of Beauty," deems all women to be perfectible, and that their beauty or gentleness results from a thousand nothings to which they have paid no attention. To develop these little details, to attenuate little faults, to learn the art of pleasing, to have gracious movements, such is the purpose of this new female specialist. Madam Alberti, leaves far behind the "lessons of deportment," so much esteemed in former years, but to-day out of date.

The eyes being mirrors of the soul, Madam Alberti bestows much atten-

tion on their education, for most all women have pretty eyes, but very, very few know how to use them. Look around you, my masculine friend, and you will be astonished at the truth of this remark. How many women do you know who understand how to use their eyes? No matter how plain the woman, if she knows how to use her blessed eyes the man falls an easy victim to coquetry. The majority of women who try to use their eyes make frightful grimaces, or, rather, often have a beastly way of looking. This is all owing to a lack of education and criticism. It is difficult even for a young woman to make handsome eyes even in front of a looking glass, for our pretty little friends, nine times out of ten, give deceiving glances for fear of awakening a rival.

One can understand the gravity of this state of affairs, and it required the natural American solicitude for beautiful women to give the world a new remedy. The whole course of eye education is directed towards what we French call *au regard*; the young lady pupils in the New York "Academy of Beauty" are taught to move their eyes to the right, to the left, looking down, glancing up; all without awkwardness and with eloquence, and their eye motions are adapted to what is said. This harmony between the eyes and spoken language is not as easy to obtain as might be thought. To make the eyes melancholy or laughing, languorous or timid, dreamy or ecstatic, is to comprehend, is to understand, a few of the difficulties Madam Alberti has to overcome. But how happy the maidens who possess such talent! They are well armed for the struggle of life. To know how to cook, to wash linen, to keep house, to care for children, all that is nothing compared to the science of controlling one's husband with a pair of eyes alone. Few men there are who can resist loving one of Madam Alberti's pupils after the first glance.

After the eloquence of eyes we must educate the nose. This makes you smile, my masculine reader. The nose is much more mobile than you believe. To convince yourself of this

you have but to look at a corpse; it differs from one asleep by the immobility of its nose. Madam Alberti has remarked that passionate women have a very dilatable nose, the alæ of the nose tremble, giving a very piquant expression to the physiognomy, that is more than agreeable to the majority of men. Madam Alberti educates the nose to tremble slightly, a seductive quivering of the nostrils, let us own, for the shame of the gentler sex.

As to the mouth, it has an altogether select education by itself. It takes several months of real hard practice to fully educate the carmine lips of beauty. It is necessary to pronounce daily, over and over again, a hundred times, certain phrases and special words that make the lips supple and end up by giving them a savory expression, a ripe cherry awaiting the plucking at June tide. The words most used in this system of mouth education are the words *prunes*, *prisms*, *potatoes*—words of marvellous propriety. In speaking these cabalistic words for entire days we may hope to obtain a sweet and expressive mouth, and such educated lips never act foolishly.

Another beauty taught in Madam Alberti's "Academy" is the education of the feminine neck; it is taught gracefully flexibility; it bends with grace, and with a thoughtful and intellectual forehead, and a chin taught to vibrate in unison with the mouth is enchanting. An educated neck and chin never indulge in laughing motions when the mouth is smiling.

Madam Alberti also gives an educational course for young ladies in how to sleep gracefully and beautifully. Madam Alberti, without much regard for the feelings of her sisters, declares that the majority of women sleep like "lumps" of flesh, and that such sleeping in time will destroy the most celestial beauty. Most husbands are fond of gazing on sleeping beauty, and its eternal youth and innocence. Madam Alberti's pupils are taught to sleep without snoring, even after heavy dinner parties; they become living pictures of dormant beauty.

Such is the education given by this

wonderful American doctress, and she completes her course, too, by teaching her pupils not only the art of captivating husbands, but also the art of holding them after they are captured. It is said that so far not one of the Madam's pupils has failed capturing a wealthy man, and once married the husbands of her pupils never reappear at a masculine club room again, nor have they ever been seen at the French ball.

Ah, well! It is only too true that the woman who has fine eyes should know how to use them; her lips should smile agreeably and ever be coquettish and kissable; she should undulate her neck as gracefully as the swan. These may be said to be mere bagatelles, but they count with all mankind, for man is ever the lover of feminine beauty. The beauties are the silken cords that bind human hearts together. It is not such a hard matter, young ladies, to catch your gold-fish in a net, but you must learn the secret of keeping him after he is caught.

Madame Alberti also gives a finishing course, giving instructions of how to divest one's self gracefully of feminine attire, as also the art of retiring, keeping up the protesting and eloquent expression of the eye while psychological moments are passing. She teaches young women the art of true marital modesty. Madam Alberti's pupils are taught to be as charming at home in the *boudoir* as in the gilded *salon*. But alas! Such lessons are learned only by hard and continuous practice. A musical education is nothing compared, as regards difficulties, to the system taught in Madam Alberti's "Academy." The Madam has so few pupils, so far, that no additional professors are needed on the staff. So it will be useless for young doctors to write asking for professorships.

* * *

From beauty to hideous monstrosity is a long step, but long steps are often taken in "Parisian Medical Chit-Chat."

Camille Dareste is one of those ancient figures of the *savant* order, of that rare race of whom so few types exist.

Born at Paris, on November 23,

1822, he trimmed his sails at an early hour towards investigations that were to make him illustrious. While a simple pupil at the Lyceum he was a passionate reader of the works of Geoffrey Saint Hilaire, the famous author of the greatest treatise on teratology ever written. The latter had made a most complete study of monstrosities; he had even sought to produce them by submitting chicken eggs to abnormal incubation. He did make monsters, but he could not go further, for at his epoch (1820-1826) the secrets of embryogenesis had not been discovered. It was reserved for Dareste, in using his knowledge of the last named science, to explain congenital malformations and create an experimental teratogenesis. He worked a long time before making his first monster. In 1858 he was named Director of the Laboratory of Teratology to the Practical School of Higher Studies. It was at the epoch that Broca founded the Society for Anthropology. On the same floor, some years later, in a small and obscure laboratory, Dr. Dareste saw his first monster hatched. Teratogenesis was now on a firm foundation; monsters were produced in multitudes. Dareste was able to obtain over thirty thousand specimens—wonderful creations, too—Cyclopeans whose single eye might have frightened the companions of Ulysses, Symelians, ancient swine with both lower limbs united, animals with two heads and eight legs, twins with trunks united, etc.—everything from the domain of fable to augment his scientific conquests.

For monster poultry reproduce the same types as human monsters; the teratogenesis of fowls explains all branches of the vertebrates.

One may obtain monsters in various ways, by warming the egg unequally, by varnishing or glazing certain portions of the shell, by shaking it during the period that separates the laying of the egg and putting it in to incubate. Only recently Feve made monsters by submitting the eggs to the action of electric currents or injecting toxins under the shells. The most different types may be obtained by using various processes. The homogeneous cells that form the

embryo react at the injurious agent and evolution is modified. It is, moreover, the portion of the embryo interested, and not the nature of the agent, that determines the malformation.

In all cases we are able to explain how, by what primitive deviation of type, all these malformations are produced. Among the curious things let us describe the duplex heart. The embryo, in its primitive condition, has two hearts, that later on are united. One of the most unexpected monsters is the unphalocephalus, whose head sticks out of the umbilicus and whose heart is found above the head, naked upon the back of the embryo like the basket on the back of the rag-picker. In this monster the head, arrested in its development, is inflected, and the two hearts are united in one above.

All these discoveries were at first only met with indifference or laughter, that which generally occurs to those who occupy themselves with questions outside the beaten paths of medicine. It was Darwin alone who wrote: "The experiments of Camille Dareste are full of promise for the future." In fact, they tend to clear up the obscure problems of heredity. Only recently one of our best known *savants*, Delaage, put the points of this question into a voluminous treatise ("De la Héredite"), and arrived at the conclusion that the cells of the embryo undergo evolution and modify themselves so as to conform to the conditions of their surroundings; this latter would all be in their evolution. Now, by modifying their surroundings, Dareste produced monsters. If this is true can we not, when we know all the factors of the problems, obtain new races? An experiment permits us to suppose this. Dareste obtained exencephalus chickens. Now the crania of poultry known absolutely as the Houdans, in which the cranial formation is incomplete, have a tuft of feathers upon the head.

This curious study has of late years been undertaken in foreign countries, among others, by Gerlach and Wrigle. Finally, recently some Frenchmen have undertaken it anew. The teratogenesis, created in France, has been also under-

taken in foreign climes as well. Blanc and Guinard, of the Veterinary School of Lyons, and Fere at Paris have all shown the justice of Dareste's conclusions.

This late justice explains why Dareste has not attained the rank and honors to which he is entitled. For if it be the Academy of Medicine, and if he obtained the prize of the Institute, the latter never opened its doors to him. Such human honors are, perhaps, after all, of but little importance as materials for study. If Dareste had been an American or Englishman or German, it would have been different. But Dareste, alas! is French, and in France most often the learned are only honored after they are dead.

Herpes Zoster.

A solution of morphine in collodion painted over the region affected will often relieve the intense pain attendant on herpes zoster.—*Med. Summary.*

Bibliography.

NETTLESHIP ON THE EYE.

New (fifth) and revised American edition. Lea Brothers & Co.

The fifth edition of this work on the eye is just out. It has been enlarged and revised and presents a very attractive appearance. It is abundantly illustrated, and the book work is very good. It commends itself especially to students, and its former popularity will be greatly enhanced by the additions and improvements which have been made in the fifth edition.

OUTTEN ON DEGENERATION.—Dr. Warren B. Outten, Chief Surgeon of the Missouri Pacific Railway, has written a book entitled: "Man's Inherited Martyrdom—A Fitful Study of Degeneration." The work is said to be one of the greatest interest, and doubtless will meet with a large sale. It will be published as a serial in the *Tri-State Medical Journal and Practitioner*, of St. Louis.

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Original Articles.

INHIBITION IN ITS LATTER-DAY ASPECTS.¹

BY DAN MILLIKIN, M.D.,
HAMILTON, O.

I suspect that I am using a redundant phrase when I speak of the latter-day aspects of inhibition. The whole doctrine is of these latter days. Our knowledge of inhibition as a physiological principle may be said to have begun with the experimental physiology of certain nerves which have power to moderate the respiration and the circulation, and this knowledge is not at all old unless some of us are old—and that is a sentiment not to be entertained for a moment.

It is, indeed, an interesting fact that, from the time that men began to study individual development, the advent of one function after another was noted in the growing child or youth, and that it nevertheless escaped the attention of philosophic men that function—any function—was always rampant and lawless for a time, that it afterward subsided as to its intensity, became co-ordinated with other functions and passed under control. And it may be necessary for me, even in this company, to state formally the law that *all functions, even including all mental operations, are, at first appearance, a law unto themselves, and that control, regulation, inhibition, come later.*

Let us make an exception before we remark the wide application of this law. Respiration appears to be perfectly

regulated in the new-born. The child whose extra-uterine life may be reckoned by minutes, breathes as well as he can ever breathe; the impulses toward inspiration and expiration are perfect in their rate and their intensity; the checks against too rapid breathing are there present, also; and in all of the years to come there is no possibility of improvement in the process.

And I think they do not err who say that the fetus would be drowned in its own liquor amnii if there were not perfect inhibition of inspiration before birth. It appears that the child is stimulated to make inspiratory efforts whenever its blood lacks something of its normal proportion of oxygen; this has been observed when a child happened to be born in the chorionic membranes, and it has also been observed in operative cases when the uterus has been opened and the placental circulation has been interfered with. From what is known we may well guess that inspiration of the unborn infant is solicited by the de-oxygenation of the blood when the mother sinks into syncope, or when she is in tonic spasm. But, in any case, the very initial entrance of liquid into the nostrils seems to act as an efficient stimulus to inhibitory centres, and so the inspiratory movements are checked just as they announce themselves. The informed obstetrician lays upon us the injunction to wipe out the nostrils of an asphyxiated infant most thoroughly, and this is done not alone to give easy access of air, but to forefend the danger that inspiration shall be inhibited by a stimulus proceeding from the clogged nostrils.

Another highly complex function is fairly perfect at birth but its inhibition is exceedingly imperfect. The new-born child sucks, but it is to be noted that it

1. Read by invitation before the Academy of Medicine of Cincinnati, December 6, 1897.

sucks everything and all the time. If the little creature is awake the mother's breast or cheek, the father's finger and the blankets—all alike excite the sucking action during the first few days of life; nor is there any sign of control or regulation of this important function until the child has passed some weeks.

So that, examine the little biped as we will, we do not find in it the power of performing any action under any harmonious system of checks and balances, if we except the very essential action of breathing.

In the wild and senseless movements of an infant's legs we may easily perceive all the essential motions of walking; but the child is not to walk until some twelve or eighteen months have passed. In the irregular action of the arms and fingers we can detect every single motion that is necessary for all sorts of adult handicraft, even for engraving, needle-work, painting, sculpture, and for performing on musical instruments. But nothing is under control; and nothing of these movements can come under control until, after months and years, inhibition and co-ordination are made perfect.

Making inquiry of somewhat deeper muscles we note that the rectum and bladder act as retention-reservoirs for only a very short time, and are habitually emptied before they are full. Control of these by inhibition comes not until after many months, and too often we find that it comes only after years of solicitude and laborious training. When it comes, inhibition is imperfect, apt to fail in sleep or under the stress of emotion, and full and perfect control must sometimes wait until there has been a notable development of intellectual and moral qualities, so that the necessary machinery may be fully aroused to the physiological level by pride and shame, fear and love, rewards and punishments.

And here again we are confirming and justifying the principle which we laid down at the beginning, that function appears first, and control, which involves inhibition, comes afterward.

But let us cross over from the muscular system of the growing child to its nervous system. We will be able to say

of its early muscular movements that they indicate, at first, an aimless activity of the spinal cord. The brain seems for many months scarcely able to send over efficient commands to check the anarchy which prevails below. Even after the spinal cord has apparently come into subjection on a basis of preserved autonomy and actual loss of independence, it breaks out in fairly successful attempts at rebellion. Much of the apparent restlessness of children is of this character. Senseless drumming with the fingers, hands or feet is prosecuted by the spinal cord in actual opposition to the commands of the brain. The tendency to convulsions in children, on the slightest provocation, indicates this rebellion, absolute but temporary, against the sovereign power in the cranial capital. Chorea is a rebellion more lasting, for it runs on for weeks and months, and in the rare chronic cases it runs on like the Cuban struggle, which we begin to recognize as an inefficient revolt of bandits against an impotent central government. Epilepsy we recognize as the work of a crazy mob of spinal ganglia with anarchy to the point of exhaustion.

But the mandates of the higher centres prevail in time because they are orderly, persistent and somewhat uniform in action; they finally wear their paths through the nervous system and are then recognized as fixed habits. In civil law and in daily life men recognize the truth that usage expands into custom, and custom becomes law, and law presently becomes a fundamental part of the constitution by very force of long standing and long recognition. So it is in the microcosm. The brain stands for all that is uniform and persistent and fundamental in nervous action; it is the voice of the whole nervous system, and presently it becomes dominant in all that in earliest life was most precarious and doubtful.

We have some common perception of this truth as it applies to brief episodes in life, but few of us carry out the doctrine as a law of all life and of all nervous development. Study any new and difficult accomplishment or trick for light on this subject. Most of you have

recently had occasion to master the bicycle. You began operations, offensive and defensive, with a purely intellectual knowledge that you must treadle without intermission; that you must incline the body to that side to which you wished to turn; that, if you felt yourself falling, you must run the machine under you quickly, and that you must as promptly set it on its right course again. You may perhaps recall the pains and anguish with which these commands were incessantly sent out from the higher brain at first, to and through the spinal centres. The memory of that mental fatigue is to most wheelmen far more persistent than the recollection of bruised elbows or cramped muscles. But in this accomplishment, as in all coarse work, the higher brain conquers and trains the lower to such an astonishing degree that the spinal centres finally become so far under control that they will send out all needed impulses to conduct a journey a wheel while merely watched by an imperious brain, and, better than that, they finally come to such a state of educated servitude as to take charge of the whole affair and accomplish automatically the whole trip proposed and initiated by the brain, be it a rod or a mile, in right lines or in curves.

I have spoken of the brain as if it were a unit—as if it were a czar, an emperor, a kaiser, or some such anointed humbug. But this is hardly good enough physiology for such as we. To be more accurate, we must say that the brain is itself highly complex, and that it is in very truth a republic, or at least an oligarchy, subject in its several parts to laws of rule and of service.

The early operations of the brain are as lawless as the early movements of the baby's legs, and they appear to be, at first, highly automatic. Probably, as many think, the will becomes aroused by accidental prehension passing into deliberate prehension. At any rate, the will appears as a biological fact and grows strong enough to operate upon the whole muscular system. It lastly grows strong enough in the adult to cover the whole field of human action, and possibly the wide world.

Thoughts are lawless in early life. Most hearty children have no mental self-control unless they have had the good fortune to attend a kindergarten in early life. The thinking parts of a child's brain respond almost immediately to stimuli. For this reason their thoughts are restless, feeble, fickle, and without plan, like their early bodily movements. Hence their frankness, their charming transparency, their inquisitiveness, their impressibility. They are so inconsequent in thought as to be hardly coherent.

And if this is true of their intellect, much more is it true of their emotions. They know no control at first appearance in early life. Those soonest checked are those which are most obnoxious to older people; they feel the pressure of public opinion. But other emotions go on quite unchecked until the child has passed some years. And then comes approaching manhood or womanhood, bringing a storm of new emotions relating to sexuality which the young boy or girl can hardly master in any degree.

But from early baby days the judgment is at work, imperceptibly in the earliest years, but more and more powerfully until some years past the time of full growth and manly and womanly perfection. Little by little the will begins to assert itself, always trailing behind the judgment, suppressing or reinforcing the deliberate thought and the passing emotions. Little by little the worthy man or woman achieves a very notable mastery over self.

And so here appears inhibition in the very highest field of biology. Here is inhibition operant on thought and feeling. Here is the amazing power of control over rampant automatic mental operations. Here is order, brought out of threatened chaos. Here is co-ordination in the realm of thought itself, and it is always to be remembered that one-half of co-ordination is suppression. Here are easy paths established which must presently become imperative habits, possibly to reappear in offspring by inheritance. Here is the judgment of the individual made virtually supreme over all, for the will acts, in the main,

according to the best and most intelligent opinion of the individual.

And I confess that I am unable to set any limits to this principle of control in the nervous system. The latest physiology tells us that the units of which the nervous apparatus are compounded are neither cells nor nerve-fibres, but neurons; and that a neuron is in truth a little brain capable of receiving and originating impulses, and that there is in each neuron a source of inhibition and control.

And what speculation shall I offer you concerning the trophic nerves? It appears to be well settled that the nutrition of every part is determined by nervous action. The cells multiply themselves and make repairs of this and that and the other part at the behests of nerves which have been well called trophic. But what of limits to this action? Is it by nervous action that the cells are checked from too great multiplication? If so, there is inhibition of a sort which is most important, and it is easily possible that in this direction we are on the verge of great discoveries. Civilization must and will have a cure for cancer—the curse of civilization.

Secretion is known to be increased or diminished by the action of nerves in most cases, and we suspect that it is so in all cases. And of late it has appeared that the secretion of some of the ductless glands is itself a sort of drug inhibitory to certain vital processes.

And waiving all discussion of so obscure a question as the inhibition of secretion by the direct action of the nervous system, it is perfectly certain that the indirect influence is positive and universal. The discovery of the vaso-motor nerves makes this quite clear. Throughout the whole body the calibre of the small blood-vessels is regulated by the vaso-motor nerves, and these are keenly responsive to influences which are poured in upon them from the central nervous apparatus. And, since secretion is roughly proportionate to blood-supply, it is quite certain that the rate of secretion must be regulated and determined by the nervous system in this somewhat roundabout way.

And while we speak of the calibre of blood-vessels it is well to remark that this appears to be possibly the most important phase of the circulation of the blood. It begins to be perceived that the heart is actually, as it is morphologically, a mere section of the vascular tract, and that it has no unique function. It is many a long year since microscopists remarked that, when they had the living blood-vessels under observation, they would fade away from the field and anon would come again, and it is coming to be the received doctrine that they faded away by contraction, and that the blood-vessels throughout the whole body are living and palpitating in such fashion that the circulation of the blood is carried on by the vessels almost as much as by the heart. And certain it is to any one with correct mechanical ideas that the heart alone cannot regulate the amount of blood which the remoter organs ought to receive from time to time, nor could the heart, unaided, drive enough blood through the remoter organs to supply their minimum demands. Now if we fall into this line of thinking we vastly magnify the importance of the vaso-motor nerves and of the regulating centres which control them, and it is my hope that you have here, in a consideration of the vaso-motor nerves, a temptation to look upon inhibition as an almost universal principle.

But is 'it in fact a physiological principle? Let us apply the touchstone of the concrete. Within recent years I have had something to do with a family in which there are three boys. Their parents are in despair at the stupidity of the oldest boy, and they make out a case against him by a study of his grades at school. The boys are well-grown, energetic, restless and athletic. They are absolutely wolfish as to their table-manners, the quantity of food consumed and the rate of ingestion. They are so inquisitive that to converse with them is simply to dodge a fusillade of questions. They all suffer from nocturnal enuresis, and, by the way, they have all been circumcised in infancy. Let them have a trifling sickness, a mere touch of influenza, a pharyngitis, a fit of

acute dyspepsia, or what not, their temperatures will mount into alarming and pernicious figures. One of them, during a mild attack of scarlet fever, developed true mania with slow recovery, and presented to me the only case I ever saw in a young child. In this little group I note the lack of control of motion, for in these boys control has not passed the infantile condition of immediate responsiveness to stimuli; I note that intellection is in the same tremblingly responsive condition, though perfectly normal in all other regards; I note that operations connected with alimentation show the same lack of inhibition and of regulation; I see in the temporary insanity of one of this group a manifestation of the same general defect of the nervous organization; I perceive, by the help of my thermometer, which has no theories, that thermotaxic centres are feeble in their regulative power; I perceive that inhibition is weak at the portals of the bladder. What else is lacking in these boys? Positively nothing. As to function they are beyond my criticism. They are well equipped for life. Nothing is amiss with them save the lack of normal inhibition of a number of functions, and these functions are so diverse and so widespread that I indulge myself in the idea that inhibition, or control by suppression through inherent force, is itself a function of so general application that it may be said to be a physiological law.

We have remarked that in the development of the individual, function comes first, and control (or the power to abate or suppress function) comes later. How is it at the other extreme of life? The rule appears to be that the more recently acquired habits are shed off first. Inhibition fails gradually in extreme old age, and leaves the very old person to be buffeted by mental and nervous actions which are fortunately not so strong as in youth, but are nevertheless so strong as to reveal to us the truth that they have escaped from control. Old habits come to the surface; suppressed instincts reveal themselves anew. It is as if the old person were stripped for the grave.

The very old person who conforms to the lowest type of senility is degraded simply by this loss of the regulative power which higher centres exercise over the lower. Age need not be so very far advanced—it may be barely announced—when the spinal cord begins to overmaster the brain in some lines of activity. It is for this cause that manual skill begins to run down. The dignity of repose begins to be lost early. The fantastic paralysis agitans, and other allied maladies, announce the more or less successful rebellion. Intellection begins to return to the juvenile type, and lastly to the infantile type, so that we may use a popular phrase and yet be scientifically correct when we say that such an one is childish. For even the moral characters of baby days return; the intense and amusing egoism and egotism come again, with the concomitant selfishness and personal solicitude. Youthful habits come again to the surface, so that we find many old persons almost insanely addicted to the pleasures of the table, and, curiously enough, to them comes again that marvellous digestive power which we associate with early adolescence. We might expect that with failing control the sexual side of human nature would come again to the surface, and it is even so. The degenerate old woman speculates upon the probabilities and possibilities of pregnancy. She takes infinite comfort in a leucorrhœa, real or imaginary, if it is only sufficient to hold the attention of her friends and her physician; she would be “examined” by a gynecologist. Even in refined women a certain freedom of speech begins to appear, and in women of a coarser type and coarser breeding this may easily pass into foul ribaldry. And as to men growing old, there is no limits to their lewdness if the smouldering fires outlast the failing control. Their antique follies hold some proportion to their youthful passions. You have seen melancholy cases in which the aged pastor ignores the men and the good old women of his flock and devotes himself to the younger ewes; your clinical experience has made you acquainted with the aged man of busi-

ness, who, through a long life, has had hardly time for meals or marriage, and who, in his old age, becomes a white-headed flirt, to the amusement or disgust of the young women on whom he forces his attentions; you have too much knowledge of the aged physician who has passed into these barren years with extreme degeneracy, who can discourse of no diseases lying without the female pelvis, and who harps forever and forever and forever on alleged gynecic researches he made in his early years; you know something of the aged statesman who, emulating the vicious performances of his young and vigorous associates, is stricken with apoplexy in the arms of a prostitute, or, if the performance goes not so far, loads his pockets with the memoranda of the street addresses of lewd women; and the daily papers, always bearing a luxuriant crop of filthy news, keep before you the wretched old tramp who makes exposure of his genitalia where he can do so most sensationally and safely.

It is my purpose to remind you that this marks not the development of any new thing in the degenerate old person—this hideous outbreak of sexual psychopathy. It is not growth or development or disease which brings these vicious practices to the surface in old age. It is rather the atrophy and the slow attrition of that precious something which through long life has overlaid, controlled and suppressed these vices. Possibly all of us, if we deal with ourselves in perfect frankness, will quietly admit to ourselves that at some time, or at many times, between sleeping and waking, we have been no better or stronger in virtue than the worst of men; possibly you have started from your couch like Banquo, who could not restrain some outward expression of horror at the thoughts that nature gives way to in repose, and have been brought to own that you were not far removed from the worst of men; possibly, when you next start from sleep, overwhelmed with the shame of complicated wickedness you have proposed to yourself, you will be ready to admit with me that the mysterious something which in our best days and

our best years suppresses and controls us in god-like fashion is neither more nor less than that principle which we have been discussing—the principle of inhibition—operating in the highest planes of life.

If by reason of strength the vital powers far outlast the declining powers of the higher centres, there is sometimes seen a sadder spectacle in senility. In such cases the last glimmer of intellect is expended on baby-like attempts to explore the natural openings of the body and to defile the person. But even in these most melancholy cases we should recognize the fact that nothing new has appeared in the patient's life, but rather that something old (old as infancy) has come to the surface.

And what has all this speculation to do with therapeutics, our ultimate aim? Simply this: We do wrong and sin in the light of sound physiology when we seek to suppress inconvenient symptoms which we cannot affect directly. We may, in many cases, do much better by working in a roundabout way, invoking and stimulating nature's methods of control and of cure.

The treatment of epilepsy will, I believe, in non-surgical cases, take the direction of an attempt to restore the lost equilibrium between the brain and the spinal cord. This will be attempted, and I hope will be accomplished, by the use of remedies which shall exalt the powers of the highest centres. Possibly sedation may disappear from the treatment of this disease.

The treatment of chorea will, I think, advance on the very same line. Even now physicians are very much inclined to let the rebellious centres alone until the powers of the higher controlling centres have been reinforced.

The treatment of all degenerative diseases of the nervous system (old age included) will advance in the same direction; indeed, it is not too much to say that it has advanced in this direction. The removal of restraint from the insane was a confession that the relief or suppression of symptoms was not worth the doing. The education of the insane in systematic schools has begun to appear as a therapeutic measure, and is

quite in line with the attempt which has been made to strengthen the higher centres by systematic labor, and by family life in cottages rather than in great asylums. Widely diverse forms of mental maladies are beginning to be recognized as forms of brain-disease in which certain functions have run away from too feeble control; and to increase control the neurologist invokes the aid of stimulant drugs, and of electrical stimulation, of hypnotic suggestion, of moral influences, and, in appropriate cases, an atmosphere of high mental culture.

Going lower down the cerebro-spinal mass, we observe that locomotor ataxia is no longer a pressure-disease from hyperplasia of connective tissue; it is a malady of neurons, and will be treated, as I suspect, by systematic attention to the health of these nerve-units, their inhibitory and controlling powers being duly remembered.

The principle of therapeutic control from within prevails in the modern treatment of chronic poisoning by alcohol, morphine and the other nerve-tickling drugs. With brilliant success worthy men and quacks are alike making good cures by getting within the patient to arouse in him the necessary hope and shame, pride, stubbornness, and lastly the self-control; and it is generally admitted that without all this there can be no cure.

It is the proper and decent boast of this last half-century that the intelligent average citizen, and even a few of the lawyers, have discovered that no punishment short of death, or that living death which we politely call permanent seclusion, will in the slightest degree avail to diminish crime. So far as crime is due to disease or defect, it should be treated by the methods I have indicated—that is to say, by the most powerful suggestion, with stimulation of the dormant, diseased or atrophied mental and moral qualities. If that cannot be done nothing can be done except the mere destruction or seclusion of the culprit for the safety of society; but this last resort should be admitted as a therapeutic failure.

And possibly (I have almost lived to see it) there may come a good day

when, through the efforts of the physiological psychologist, the aid of the same principle of inhibition will be invoked in pedagogic work, and teachers and parents will come to perceive that suppression from without is of no avail in education, while inhibition from within, in the presence of rich evolution of function, is the whole secret of character-building.

[FOR DISCUSSION SEE P. 54.]

A SPECIFIC FOR PUERPERAL ECLAMPSIA.

BY F. S. WRIGHT, M.D.
GROVE CITY, O.

While I was yet a student of medicine I saw with an old practitioner a case of puerperal eclampsia, about a mile from a village near Columbus, O. A boy was sent to the village drug-store for chloroform, and the doctor began the administration of chloral and morphine, with no noticeable effect. I suggested as a palliative measure that an ice-bag be applied to the head. The doctor assented and it was applied. I also applied, in a folded napkin, snow to the violently pulsating carotids, and, to our surprise and gratification, the convulsions did not recur.

I had been in practice about two months when I met another case. This time I applied ice as before, and gave, in addition, a full dose of veratrum viride for its depressing effect upon the heart. She had but one more convulsion, and that within a very few minutes after the cold application.

These are the only cases I have ever seen, but Dr. Henderson reports a case successfully treated by this method, and it is at his suggestion I submit this for publication.

The etiology of the disease is obscure, the treatment symptomatic. I think, therefore, that my fellow-practitioners will be justified in giving this method a trial, at least when the old one fails.

THE United States quarantine service has added the disinfectant use of formaldehyde gas to its requirements.

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of December 6, 1897.

Vice-President, J. C. OLIVER, M.D.,
in the Chair.

W. EDWARDS SCHENCK, M.D., Secretary.

The guest of the evening, DR. DAN
MILLIKIN, read a paper entitled

Inhibition in Its Latter-Day Aspects
(see p. 37).

DISCUSSION.

DR. J. M. WITHROW: It affords me great pleasure to personally offer tribute to the paper of the evening, and to extend to the author my thanks for the opportunity to hear it so beautifully presented upon such an important subject. I believe in inhibition as presented here to-night; I believe that there is a force in the being that belongs to the force in question.

One can readily note the progress of a race from the child to the man, and then the man of society controlled by governments of his creation, which is the result of inhibition. Take the early history of our country, when they were influenced by witch-craft; that was but one hundred years ago, but years of inhibition have contributed to higher morals, and that habit is but of the past.

I believe to-day that there is an evolution recognized as a national force that commands and influences administrations, and that this inhibition will go on, not to anarchy, but will go on until the time will come when we no longer pray, "Thy kingdom come."

DR. THAD. A. REAMY said that he had been charmed by the paper, as any one who heard it must have been. He knew of no one more perfect master of the English language than is Dr. Millikin. His imagery is practical and his rhetoric matchless. His statement of modern physiological advances in certain directions is refreshing. The entire

paper prompts serious reflection. The arguments offered to sustain some of the conclusions reached are at least ingenious. The speaker could not, however, consent to the entire accuracy of the picture given of senile decay. Loss of will power, loss of physical coördination, may and does come to individuals, as a result of disease in early life. He had seen in the streets to-day a man but forty years old whose gait plainly told that he had disease of the posterior columns of the cord. He had seen a woman at thirty-seven suffering of *paralysis agitans*. In Guthrie's "Military Surgery" many cases are quoted showing that soldiers were found on the field in the Crimean War wounded at the base of the brain, but yet living, and a state of extreme priapism existing.

The speaker had in other years known a man of the highest moral character, who died at the age of forty-five from the consequences of a tumor resting upon the bridge of the sphenoid bone and extending backward to the margin of the foramen magnum, of course making pressure upon the medulla. This tumor grew slowly. For nearly a year prior to his death, long before he was confined to his bed, it was difficult for this man to restrain himself in the presence of women. For some weeks prior to death he suffered almost constant priapism. These are illustrations of the loss of inhibition from gross and localized disease occurring during the full strength of manhood.

But I submit that this is no part of the picture really witnessed in the old when senile changes of structure have modified inhibition. Local disease of the brain, especially such as exists in some forms of senile dementia, may and frequently does make the subject an object of pity, the animal passions asserting control, and leading to social scandal, as intimated by the essayist. But such instances are exceptions to the rule. The melancholy picture of senile decay so graphically painted by the distinguished essayist is therefore inaccurate. Michael Angelo, who did much of his greatest work after the age of

seventy; Bismarck, whose noble and commanding features stand out most strikingly in the excellent picture hanging before us at this moment in this hall, aided by his great General, Von Moltke, also an old man, established and consolidated the mighty German Empire. When this work was done each of these giants was far past the age when, according to the essayist, they should have been victims of senile helplessness. Look at John Quincy Adams, at eighty, making in the United States Senate one of the greatest speeches of his life; as he was falling, looking out through the window, exclaiming: "This is the last of earth, I am content." When the conquering hosts of Gustavus Adolphus could not be arrested in their irresistible marches, Wallenstein, an old General whom the Austrian Emperor had retired and whom he hated, was appealed to and again assumed successful command.

But I need not refer to the innumerable examples in the past, nor to equally inexhaustible examples in the present, of men and women of extraordinary ability in all pursuits who have maintained great vigor to extreme old age. But the same is true of those of less distinguished ability. As a rule, both of men and women who have lived correctly, the afternoon of life is joyful. The moral, spiritual, and intellectual powers are in the ascendancy, not crippled by the diseased inhibition of senile physical decay. To them there is, it is true, change in tastes and fancies, change in the lines of their usefulness. But they may, nevertheless, still be useful and honored citizens. Dying in a state of euthanasia, above their setting sun is seen the bow of hope.

It is my hope—and is, indeed, my belief—that this shall be the picture closing the life of the essayist.

DR. N. P. DANDRIDGE: I arise to express the extreme pleasure that has been mine while listening to the doctor's paper, which I found not only interesting, but also stimulating. Much has been opportunely said that impulse should be met by control. I have been

particularly interested in that field that pertains to the drug habit and the stimulation of enforcing control, by the forced control of the higher over the lower centres, accomplishing a cure.

DR. H. W. BETTMANN: In inhibition as expressed by the essayist to-night the question arises whether he has added anything to what is already known. The point that his paper raises is in reference to the morals of the people, which is due to and is called the will but by physiologists, inhibition, though I cannot see the advantage to be gained with a new word that means the same.

The will has been defined as a mental consciousness that controls our actions. Later psychologists define it the same, while the older say that it is a sanction of what we do, and that the will is something that can be appealed to.

The child restrains the bladder through an effort of its will. What is an inhibitory centre? Why not say our will?

Those who have attained to eminence have done so through subjecting the lower to higher centres. It seems to me to be a transfer from a psychological to a physiological expression.

In closing, I desire to refer to the beautiful manner in which Dr. Millikin has presented this subject.

DR. J. C. OLIVER: As bearing upon the merits of inhibition in a practical sense, attention should be called to the Weir Mitchell method of treating hysteria and allied conditions. In this method the improvement is, to my mind, brought about by the cultivation and stimulation of the inhibitive powers of the patient, and this stimulation is almost entirely the result of environment and suggestion from without. This may be regarded as strong confirmatory evidence of the truth of the ideas advanced by the essayist.

The power of inhibition in spasmodic troubles was very forcibly brought to my attention by the statement of a patient who was the subject of epilepsy. He was an intelligent man, a lawyer by profession. He told me that through an effort of his will he had been able to ward off attacks during the day, but that he still suffered occasionally at

night. A friend of his, likewise a sufferer from epilepsy, had told him that he had succeeded in doing the same thing.

DR. L. A. MOLONY: If it be not a matter of presumption in one so young as myself, and a member for so short a period, to mingle his observations with those of more mature years and experience, I desire to append a few remarks to those of my most esteemed predecessors.

The power of inhibition does not appear to have been lost in former times alone in those lamentably deficient in mental vigor, but seems to have had some of its most marked exhibitions of weakness—or “degeneracy,” if you will—in those whom history has taught us to look upon and consider—nay, in some instances even worship—as the famous and ideal men of their periods.

But for all this may we not ascribe a cause? Let us compare the influences of the periods. “In that elder day,” man was born, nurtured and reared beneath “the shadow of the sword.” Few, indeed, were they who were disposed to read, or, had their inclinations been such, could have done so. Even their religion, to be attractive, must have its spectacular fascinations! A few priests or monks alone possessed the books or parchment roll, and too often it was a most laborious task for even these to decipher their illumined manuscript.

For relaxation or recreation, besides their athletic feats, wine, women, song and rivalry held the boards, and Scott tells us of how even in comparatively recent years the ladies left the banquet-hall that their liege lords might carouse after eating.

How marked the contrast! Behold all the elevating tendencies, the ennobling influences and refinements of this *fin de siècle* period! Now the man of mind and mentality, with his increased powers of inhibition, has overthrown the man of mail. Verily, saith Bulwer, “in the hands of men entirely great, the pen is mightier than the sword!”

We must now even be apprenticed to our trade!

Alexander the Great, at the age of

thirty-two master of the then known world, and sighing for other lands to conquer, surrounded by satraps, sycophants and licentiate, died after a three days' debauch, and his possessions were divided. Socrates, the most learned man of his time, would have been considered quite a rake in this day and generation.

Even the mighty Cæsar received the voluptuous Cleopatra wrapped up in a roll of carpet and smuggled within the portals of the tomb. Nor was the faithful Antony slow in following in the footsteps of his worthy preceptor, he who had so often “barked” the trees for his dinner.”

Every one is familiar with the *liaisons* of Napoleon. Nor can we forget his sister Pauline. Eugenie was the next of the imperial line to engage our attention, pre-eminent as she slid down the sand-hills of her private courtyard, amid the mirth and laughter of her inner court.

And even in this comparatively “latter day” we hear of the worthy Washington, deplorable as it may sound, catching his fatal court while riding horseback, returning across his plantation in a drizzling rain, from one of the dwellings of his slaves.

Just now, however, our attention is diverted by that aged and disreputable Leopold, of Belgium, who, while his name may be one suggestive of boldness, his actions partake of brazenry.

Again, it may be well to repeat that the manners and customs of the times, with the methods of occupation of leisure hours, have had much to do with the elevation and strengthening of the latter-day powers of inhibition. Witness the transformation wrought in an hundred years in the field of literature. About the beginning of this century it was considered eminently proper to find copies of such works as those of Fielding and Smollet lying upon the drawing-room table, and they were openly discussed in the most common-place fashion by the young and old of both sexes. Nowadays we discover them, when found at all, in private libraries well under lock and key, and upon the highest shelves. It

would, indeed, go hard with the presumptuous young lady whose mother might come upon her by stealth reading such literature, even in the recesses of a back bed-room.

With the increase of literature, fully in pace with the increase of illiteracy, and the improvement and elevation of the standard of good moral works, the power of inhibition is tightening its coils around it, and the brain acquires fresh power, and degeneracy must soon expire for want of animation.

In conclusion, as far as my testimony is worthy and admissible, I desire humbly to offer it in affirmation of the speaker's previous observation. Certainly, whatever the demerits of his remarks may be, the paper is a most entertaining and instructive one, and our thanks are due him for the free field of thought he has opened up to us. "'Tis better to err with Pope than shine with Pye."

DR. J. A. THOMPSON: It seems to me that the most important point in the paper has so far been overlooked in the discussion. In suggesting stimulant instead of sedative treatment for the insane and epileptic, the doctor has opened a door of hope for those we have considered hopelessly diseased.

There has only been one recent paper along a line of thought similar to that of the essayist of the evening. This was an address on the "Mental and Moral Evolution of Man," before the British Medical Association at its last meeting.

It is difficult to discuss a paper of Dr. Millikin's. He approaches a subject from a point of view peculiarly his own. I have thought that our Hoosier poet had him in mind when he wrote, "But when all is said and done, he's jest himself," Doc Millikin, "and there ain't no other one."

DR. MILLIKIN: I begin to feel very glad that I came down to the meeting of the Academy this evening. I have been blest in that I have gotten new points with regard to George Washington, and, with the help of much that has been said in debate, I am beginning to discover myself. For one thing, I have discovered that I think very lightly

of the human race, though that is news to me, indeed, for I had long thought otherwise; and I have been virtually told that I hold old men in contempt, and that is news also, for I am edging into that category myself. I am asked to say that what my poor paper contains disparaging to old men and women is said only of the exceptional cases. I am not able to say that; I spoke of senility in its type. I know the exceptions to the rule, but the rule remains. In the discussion it has been pointed out that the great achievements of Bismarck and Von Moltke and Justice Fields were achievements of old men, and this is true. We may add more honored names to the list, as, for example, the names of our Dr. Holmes and of Giuseppe Verdi, who has recently completed an opera in his extreme old age; but if we do this we are simply piling up a few exceptional cases at which we greatly wonder, and this more firmly establishes the law of senile involution—that the noblest qualities of full maturity are gradually lost as age approaches.

I find myself somewhat reproached for passing freely from a discussion of nervous action in the lower centres to a discussion of what takes place in the highest. It is as if I were warned that there is no physiology of thought, and no likeness between thought and nervous activity in general. I must say frankly that I know of no fine division between these two forms of activity, and, for the matter of that, I know of nothing unique or characteristic about human thought. The difference between our mental action and that of my dog is simply one of degree; in him I find the germs of all human action, and I am not able to set limits to his intellectual and moral development save those which nature has so cruelly established when she denied him long life, speech, and a hand.

I am not living in any state of panic about man's place in nature; it is simply a biological fact and will take care of itself. Nor have I any fears that the mystery surrounding consciousness and will can be dissolved by such studies as we make to-night. It is not so in any

field of knowledge. I thank the merciful gods that we do not attack the unknown from its periphery. Rather is it true that we find ourselves in early consciousness standing at a centre where something is known by prehension and by apprehension, while beyond that little horizon all is unknown. Little by little we expand the field of view, but always beyond us is the mysterious and alluring horizon, and beyond that the unknowable. It is the joy of life to be ever thus conquering with more to conquer.

And it seems to me that if in philosophic mood we dissolve one mystery, bewitching nature straightway presents us ten for one. Here is my watch, and, as we are told, its ticking will most strongly stir the wonderment of ignorant savages. I grandly shove this mystery aside and say that the sound is produced by the escapement of the watch, animated by the mainspring which I coiled last night when I wound the watch. But having said that I come upon a mystery as profound as that which puzzles the savage; for do I not impute a certain lowly volition to the coiled spring which would straighten itself again as it was when it came from the tempering bath? and do I not wander into the very highest realms of poetic speculation when I talk of the component molecules of the spring, which, for some wholly unknown cause, tend to rearrange themselves in some former relation?

I have been asked in this discussion what we know of neurons, and with an implication that we do not know anything of them. They are hypothetical structures, though the microscope gives some little reason to believe that they will be demonstrated to the coarse eye of sense. They have come to explain and harmonize many nervous phenomena which were else inexplicable and discordant. They have justified themselves in some degree by suggesting efficient therapeutics, and it happens that the very last medical journal I had in my hand gives some account of a case in which the attending physician was full of the doctrine of neurons and was so inspired to cure an absolute

paralysis of the leg which had persisted for some fourteen months. The microscope beside me may be a very good one, but its magnifying and defining powers must be exalted many times ten thousand times before it can reveal atoms or molecules to my carnal eyes; but we do positively see atoms with the mind's eye, and all of our molecular physics and all of our chemistry and all efficient mechanical work is based upon this dream of the Greeks. When that is said I am ready to say with some force that we know neurons better than we know atoms. And, for that matter, I may add that we know neurons with a better scientific apprehension than we know the attraction of gravitation or the qualities of our own souls. That they are ultimate biologic facts is too much to say, and I for one shall be very glad to outgrow them; but I would make them very welcome while they serve us well.

Let me say that there ought not to be any confusion between the idea of inhibition and the human volition. The volition, or will, is, as I think, the very highest exhibition of inhibitory power, acting upon the very highest functions of thought. But there is inhibition in more lowly planes of human activity, and so we are to understand that inhibition is the wider term.

I have to render thanks for the thorough discussion of the big theme which I have treated in my own small way. I own that I shivered with dismay lest I had not accosted you in the right key. It is easy to discuss papers which narrate cases and tell of drugs and doses, but I hate practical papers, and like to bring floods of moonshine to medical societies, and I particularly like to wander with you under its poetic and lambent radiance.

Epistaxis.

Jonathan Hutchinson recommends for the treatment of epistaxis that the hands and feet of the patient be immediately plunged in water as hot as can be borne by the sufferer. This has been successful in many very obstinate cases.

Translations.

PARISIAN MEDICAL CHIT-CHAT.

BY T. C. M.

Sad Statistics on Life—French Medical Anecdotes—What an Advertisement for a Type-Writer Did—A Political Doctor's Free Clinic, Etc.

Sad statistics on the habits of life! An amateur of statistics has calculated the number of absolutely serene days that may be lived during a life of sixty years.

The third of this life is consecrated to sleep; the remainder is forty years.

The first ten years of life cannot be, no matter what is said, perfectly happy, since the child is not conscious that it is happy; the remainder is thirty years.

Infirmities usually commence developing at about fifty years; from that moment life is a sad existence. Cut off, then, ten years for disease and indisposition; the remainder is twenty years.

Of these twenty years, our statistician takes fifteen years of daily labor; there remains, then, five years in which a man may live agreeably, but yet subject to such moral sufferings as he may undergo.

So we are left to conclude that man generally counts only thirty days of perfect felicity in sixty years; in other words, 720 hours.

A Moorish king went still further; he said he had had during eighty years of life only fourteen days of true happiness.

They relate a funny anecdote on a specialist who opened a free clinic for females in Paris, a clinic that was private and where the patients were guaranteed the best treatment and no charges for drugs. The crowd resorting to this clinic was very large, so the doctor had to work rapidly.

"Take off your clothes. Good! I see what ails you." He wrote off his prescription speedily for his chemist to fill. "Next!"

One day he saw a very pretty girl enter and stand in the long line of waiters. "Next!"

"Take off your clothes!" Naught but a chemise remained on.

"What ails you?" asked the doctor.

"I have nothing the matter with me!"

"You are not sick? Why did you take off your garments?"

"I did so because you asked every woman ahead of me to do so, and I supposed they were all applicants for the position of type-writer you advertised for this morning."

She was engaged.

They tell of another prominent specialist, with another free clinic, who went into politics. His waiting-rooms were filled with patients. There was a time, not long since, when the crowd grew weary at the doctor's non-appearance, seeing the door of his private consultation-room remain closed. "What is the doctor doing?" "With whom is the doctor?" "My God! when shall we have a chance to speak to him?" Such were a few of the expressions from the waiting patients. About noon the door swung open, and the doctor, overcoat on arm, looked mildly down and exclaimed: "Fellow-citizens, my duty to my country as city councilman calls me to the town hall. Come tomorrow!"

The next day it was the same thing. Most of his free patients died before they obtained the consultation, the remainder afterwards.

Here's another Parisian medical anecdote. One night lately our *confrère* M. was called to his office door by the sudden ringing of the bell.

"Come quickly to my mistress!" said a maid, who was very much excited; "she has poisoned herself for love. Come quick, sir! Come quick!"

The doctor found his patient reclining on a sofa of blue satin. She was a beautiful blonde, with dreamy brown eyes, poisoned, in fact, but very slightly, as slightly as could be. She soon recovered.

A gentleman called on the doctor next day. "You were good enough to attend Miss Z. last night. I came to express my thanks, as well as to settle

my obligation. Accept this slight token, Doctor." He laid five gold louis on the table.

"Poor girl!" he continued. "She heard I was about to be married. She was in despair. She told me all about it later on. Ah! Doctor, think of her devotion! She was about to die for me." The gentleman then left.

About two hours later another gentleman entered and made the same discourse, with some slight variations:

"Poor child! It was all on my account! She thought I loved her no longer, and lost her head. She told me all about it this morning. How kind you were to go to her assistance so promptly! You saved her life, Doctor! Accept my eternal obligation—and this, too." He laid ten golden louis on the table and departed.

The doctor had said nothing about his first caller for fear of compromising his client. He could not say then that he had already been paid. Meantime, he was an honest man. He had scruples, and, after all, he would see that pretty girl again for an explanation. He was not sorry for this chance to revisit a patient who was poisoning herself for love of all the world. He called at her residence. He entered.

"Ah! dear Doctor! Kind preserver of my young life! Be seated."

He sat at her bedside and counted her pulse; then he told his little story of the two visitors.

"Two only!" she exclaimed, laughing merrily. "Run quickly to your office, for another gentleman friend has gone to pay you a bill for your kindness to me. He has just left the house."

As he descended the steps she cried after him: "Do not be alarmed, Doctor! There may be several more who will call to settle my medical account. Take it all! They say these are hard times for the doctors, but I am glad I am in an older profession."

* * *

They tell an anecdote of Labiche. "Doctors!" he exclaimed; "they remind me more of creators."

"How's that?"

"They are eternally finding methods of making something out of nothing."

THE

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317 W. SEVENTH ST., CINCINNATI, O.

CINCINNATI, JANUARY 15, 1898.

Editorial.

HIGHER EDUCATION IN MEDICINE.

This is a threadbare theme that has been worn pretty smooth through frequent iteration during the last ten years. Medical societies of all sorts, from the local village or county to the State and National association, have resolved upon it, and the medical press has done its whole duty in the way of keeping up the agitation.

The result has been eminently satisfactory. From a two-years' course of lectures, of four or five months each, and a year's pupilage under a preceptor, to a required course of four years in a medical college, the lecture terms each year of from six to nine months, is indicative of long strides and progress made. However, this has not been all, for a requirement of a preliminary examination showing that the candidate has an education equal to a high school certificate is of equal importance with a lengthening of the medical lecture courses of instruction. The effect of these measures has been to wonderfully

improve the class of men and women entering and graduating at the colleges.

Strange as it may appear, these requirements have not appreciably lessened the size of medical college classes, which may be attributed to an additional fascination of the study for men who have already had a taste of scientific investigation through their studies in natural science in high schools and colleges.

The end is not yet, or even in sight. Some of the large and leading medical colleges are preparing the way for a requirement of an A. B. degree or its equivalent from those who wish to matriculate as medical students. The schools which have taken steps to this end are Harvard, Johns Hopkins, University of Pennsylvania, Chicago Medical College, Rush, and perhaps one or two others. These are already in the van. All are large and to a great extent endowed institutions. All are directly connected with academic schools, a union of Rush with the Chicago University being at this time under consideration, and a stipulation of the union being that after a certain date all medical matriculants shall be academic graduates. Others must and naturally will follow the lead of the schools named.

Up to this time additional exactions have not lessened the number of medical students, but a demand of an A. B. degree before matriculation must certainly have some apparent effect in reducing the number of students, which is a material desideratum to the medical profession. A lessening of mortality-rates and corresponding amount of sickness demands a reduction in number of physicians in proportion to population. One to one thousand at this time would be fair to all concerned. This cannot be arrived at in one or five years, but in

ten or fifteen years a perceptible change for the better will take place.

Steps looking to a union of the medical colleges of Columbus have been taken. Hitches may occur, but in time—and not a long time, either—the work of unification will take place. Similar procedures are likely to take place in Cleveland, and finally in Cincinnati. These unifications are in response to a common trend of thought in all avenues of life, and medical educational methods are not an exception. A recent attempt at a union of two of the New York medical colleges was a response to public sentiment, and the failure a matter of regret.

New medical college charters should not be granted unless the applicant is prepared to show an ample endowment fund for a creditable equipment of the institution and resources for revenue entirely sufficient for its conduct, above any possible receipts from tuition or other student fees.

The medical profession outside of those directly identified with medical colleges are deeply interested in these movements, and should give them all possible practical encouragement.

PROPHYLAXIS.

This has been and is the goal of modern medicine. To prevent disease and thereby add to the sum total of human life, at a positive cost to every physician of a substantial part of his income, seems like an ethereal condition, and yet it pans out in an actual materialistic form, as shown by the great reductions in mortality-rates which have taken place within the present century.

Pauperism has been greatly lessened, notwithstanding its cultivation upon the part of physicians themselves and other

ultra-sympathetic, good-intentioned people. Pauperism is almost at a positive premium—at least the scales seem to be turning in that direction. Hospitals all over the land are being built, and in some instances handsomely endowed. With hospitals there must be a medical staff, trained nurses, and all the paraphernalia of an eleemosynary institution. With all of this show and glitter there must be a corresponding apparent necessity for such conditions. Empty cots covered with inviting, snow-white linen, a neatly-dressed, sweet-faced trained nurse in attendance, and all that, must be supplemented with patients. Patients are the great desideratum—patients in the cots and visible in the corridors. To get them there is the problem, and all sorts of schemes are resorted to in order to attain this purpose.

The people are educated down, not up, into the hospital idea. Conditions of actual illness induce friendly advisors to suggest a hospital. The eminent staff, best of treatment, no cost for doctors or drug bills, no nurse to be paid, no loss of sleep in caring for the sick one, and a reference to some very respectable and well-to-do people who patronize the hospital on such occasions is made, and off goes the sick one—at the expense of a physician. Not that a physician pays for the car, carriage or ambulance hire, but some one was entitled to the professional care of the patient and remuneration for service rendered. In cases of sudden illness or accident in cities the police have been trained to a using of their patrol service for a carrying of sufferers to a hospital, when in a majority of instances the patient could be as well or better cared for in his own home.

It has been demonstrated time and again that antiseptic surgical operations

can be as successfully performed and as good results obtained in modest homes as in the very best appointed hospital. In this the medical profession should get back to first principles, and in doing so will be good to itself. The hospital racket and free dispensary abuse needs revision, and needs it badly.

Then there are the people who have a tired feeling, were born tired, whose lives are devoted to an abstraction of sympathy and support from others. For a change of scenery and climate a hospital is sought—new voices, new hands to coddle, new diet and new doctor. Then by and by a possible acclimatization, and the hospital becomes the first home, and the patient a petted and patted vagrant, made so, mainly, by a hospital training. Once in, there is possession, and the nine law points are made the most of. To turn them out means scandal in a willing newspaper, heartlessness outdone, and so on for quantity and quality. Made into dead beats and leeches by an ill-timed hospital method, brought into vogue largely through the teachings and instrumentality of the medical profession. The wind has been sown and physicians are the reapers.

Let's think about it.

EDITORIAL NOTES.

REPORT OF THE HEALTH DEPARTMENT OF CINCINNATI. — Following is the statement of infectious and contagious diseases for week ending January 7, 1898:

	Cases.	Deaths.
Measles.....	15	..
Diphtheria.....	18	5
Scarlet Fever.....	24	1
Typhoid Fever.....	7	..
Phthisis Pulmonalis.....	10	13
Membranous Croup.....	2	2
Pertussis.....	7	..
Varicella.....	5	..
Total.....	88	21

The mortality report for the week ending January 7, 1898, is as follows:

Croup.....	2
Diphtheria.....	5
Scarlet Fever.....	1
Other Zymotic Diseases.....	8—16
Cancer.....	4
Phthisis Pulmonalis.....	13
Other Constitutional Diseases....	2—19
Apoplexy.....	4
Bright's Disease.....	1
Bronchitis.....	6
Convulsions.....	3
Enteritis.....	2
Gastritis and Gastro-Enteritis.....	2
Heart Disease.....	4
Meningitis.....	3
Nephritis.....	5
Pneumonia.....	21
Other Local Diseases.....	18—69
Deaths from Developmental Diseases..	5
Deaths from Violence.....	3
Deaths from all causes.....	112
Annual rate per 1,000.....	14 38
Deaths under 1 year.....	13
Deaths from 1 to 5 years.....	13—26
Deaths during preceding week.....	115
Deaths corresponding week 1897.....	133
Deaths corresponding week 1896.....	128
Deaths corresponding week 1895.....	130

ACADEMY OF MEDICINE.—Monday evening, January 17: "Diphtheria and Diphtheria." Dr. G. B. Twitchell.

To Cure Itch in Two Hours.

Employ fresh sulphuret of calcium made as follows:

Sulphur (flour).....	3 ozs.
Quicklime.....	6 ozs.
Water.....	2 pts.

Boil together till combined, then allow to cool and settle. Decant and preserve in hermetically sealed bottles.

Rub patient all over with soft soap for half an hour, then place in a tepid water bath for another half hour. Next rub over with the solution and allow it to dry on the skin for a quarter of an hour. Complete by washing in the bath.—*Medical Age*.

WANTED—A physician as an assistant in a strictly office practice. Must be sober and of unquestionable integrity. State experience and school of practice. Also want a partner in the finest and best equipped office in Kansas City, Kansas. A. H. SCHOSHUSEN.

Obituary.

DR. J. W. HAMILTON.

Dr. J. W. Hamilton, of Columbus, one of the most distinguished surgeons of this State, died at his home in Columbus, O., on January 1.

He had been a commanding figure in the medical world for almost half a century. He was a native of this county where the greater portion of his early manhood was spent. After graduating at a medical college in New York, he removed to Columbus, where he embarked in his professional career. Being ambitious and eminently capable, he was soon called to fill the chair of surgery in the Starling Medical College, which honorable position he occupied with great ability for a number of years. He soon rose to eminence, not only as a lecturer, but also as an operative surgeon, and was widely known all over the State, not only as a skilled, but safe operator as well. As a lecturer, he had but few equals, and it has been the good fortune of the writer to be present many times at his lectures. He had a very clear and forcible style, and was eminently practical in everything he said and did. The students all loved him, as he had a very fatherly way about him which was very captivating to them. He had a very engaging manner, was a polished gentleman, and his conduct at the bedside of his patients always inspired hope and confidence. He wielded the knife with consummate skill, and his operations were as a rule, successful. He performed all the capital operations in surgery. He was a leading member of many of the prominent medical societies throughout the State and country, of which we might mention the American Medical Association and the Ohio State Medical Society. He always took a leading part in the discussions of these distinguished bodies.

The last time we saw him was at a meeting of the Ohio State Medical Society held at Zanesville about two years ago, at which meeting we had the honor of reading a paper. His hair was then as white as the driven snow, but his mind was as clear as ever, and he entered into the discussions with as much interest as he did in his younger days. His social qualities were of a very high order. He was a great reader, a fine conversationalist, and was a most companionable person. With all his grand gifts of both mind and heart, he was very modest and unassuming. As true merit is always modest it was exemplified in a very high degree in him.

His colossal form will be sadly missed not only on the streets of Columbus, where he has been seen so often on his way ministering to the wants of poor suffering humanity, but the societies as well, of which he was an honored member, will ever cherish his memory and emulate his virtues. With his death another of the great landmarks in medicine has passed away. Well done, good and faithful servant, enter thou into the joy of thy Lord.

C. P. K.

Miscellany.

AN APPEAL.

To Every Registered Physician and Licensed Midwife in the United States, for Information Concerning Criminal Abortion.

DEAR DOCTOR: I most earnestly appeal professionally to each of you, regardless of your school of practice, your prominence in the medical profession, or your location, to answer the questions given below. In replying please designate each question by its number. Answers can be made in numerals, and if you do not elect to respond by letter a postal card will do as well. The face of such a card will present only an aggregation of meaningless figures to all who handle it except ourselves.

However, I will highly appreciate whatever you may impart in relation to criminal abortion otherwise than may be contained in your answers to my questions. I trust your visiting list, your cash and account books, and other data in your possession, will enable you to give *definite* or *approximate* answers without consuming too much of your time. If the 115,000 to 120,000 physicians in the United States will kindly give the information I ask, I will return to them through the medical press, some time during 1898, a summary of the results of my investigation.

I desire to assure you that every line given me on the subject of my inquiries will be held strictly private, if you request it, and should you not request its privacy, I will give it good treatment. If for any reason you wish to withhold your full name your initials will suffice. Remember my inquiries cover the year 1897, and where you cannot give a *definite* answer an *approximate* answer is desirable.

QUESTIONS.

1. Give total number of abortions from all causes that occurred in your practice during 1897.¹

1. NOTE.—Question 1 should include abortions which you know occurred among your lady patrons without the attention of a reputable physician. Any abortion that resulted from an obstinate disregard on the part of the woman, of a physician's advice, or from the wilful commission of any act which her observation, experience and other knowledge gave her reason to believe might induce immediately or even remotely the expulsion of the uterine contents, was criminal. (Any act, however simple, occurring in the daily avocation of a pregnant woman, if impelled by an intent, or even a desire or wish to get rid of her pregnancy, is criminal whether she aborts or not.) I use the word "abortion" here to mean the expulsion of the products of conception at any time during gestation to the end of the seventh

2. In how many of these abortions were the elements of criminality, to your mind, apparent?

3. In how many of these abortions, except those classed in Question 2, were the elements of criminality, to your mind, probable?

4. How many of the abortions named in Questions 2 and 3 were followed by puerperal septicemia or other diseases.

5. How many deaths resulted from the abortions named in Questions 2 and 3?

6. How many still-born in your practice?

7. How many infanticides?

8. How many viable children born in your practice?

9. How many cases of puerperal mania resulted from the abortion classed in Questions 2 and 3?

All midwives who are licensed are solicited and urged to answer the above questions so far as their knowledge enables them. Doctor, permit me again to beg that you answer my inquiries either *definitely* or *approximately*, and if for any reason you cannot fully answer all do your best on Questions 2, 3, 5 and 9. Medical journals throughout the United States are requested to favor the undersigned with an insertion of these questions in their January or February, 1898, issues.

C. D. ARNOLD, M.D.

El Reno, Okla.

The Treatment of Headache.

Headaches may be clinically divided into three principal groups. The first group comprises cases of *tic douloureux* affecting the trigeminus and the occipital nerve. In the second group come the cases of neuralgia of the trigeminus, occipital and upper cervical plexus, while in the third group are the cases in which the nerves are pressed upon by neoplasms. Migraine is not always of the hemicranial type, and is characterized mainly by exaggerated hyperesthesia of the special senses. Prof. Benedikt, of Vienna, regards iodine as a specific in neuralgia and simple neuritis, but he also employs electricity and the actual cautery. When the headache is due to the presence of intracranial tumors, iodine and mercury may render good service even when the neoplasms are not of syphilitic origin. In severe cases he even has recourse to trephining, a somewhat drastic remedy, which, as shown in fossil remains, used to be employed on a large scale in ages gone by. —*Med. Press and Circular.*

month, if the abortion was unavoidable, and to full term if criminal.

Selections.

FROM CURRENT MEDICAL LITERATURE.

Treatment of Acute Intussusception.

Acute intussusception is a condition which, if not promptly relieved, tends to a rapidly fatal termination. Unfortunately, it is not possible to distinguish clinically cases in which irreparable damage is being done to the invaginated intestine from those in which the constriction is less severe. We are, therefore, more or less in the dark as to the precise condition with which we have to deal. Experience has shown, however, that twenty-four hours is the average limit of safety, and this fact constitutes a valuable guide to treatment. Time is of the greatest importance, and whatever treatment is employed must be undertaken without delay if success is to reward one's efforts. In cases of less than twenty-four hours' standing it is permissible to attempt reduction of the invagination by injections of water or air, but these means often fail to attain the object in view, and in such event valuable time will have been lost in resorting to the only trustworthy plan, viz., reduction through the abdominal wall. This can often be done through a very small incision, so that the operative risks are small, especially in view of the extreme fatality of the condition when left unrelieved. The method of injecting air or water is, moreover, open to the objection that in a large proportion of the cases in which it apparently causes the disappearance of the tumor the bowel only uncoils itself up to the point where the invagination first began, and no further. It follows that when the distending force is withdrawn the invagination returns, entailing abdominal section as a last resort under much less favorable conditions. According to Leichtenstein's statistics cases of intussusception comprise close upon forty per cent. of enteric and ileo-colic invaginations. These are obviously out of the reach of any distending force applied from below.

Moreover, of the remaining ileo-cecal and colic cases, though theoretically amenable to distension, a large proportion do not come under treatment until the strangulation and edema of the bowel have rendered reduction by such means impossible to effect, and dangerous even to attempt. The moral of these statistics is that, except in the rare instances in which the practitioner is called in within a few hours of the onset of the symptoms, it is safest not to employ injections, but to proceed at once to abdominal section.—*Med. Press and Circular*.

On the Use of Steam in Removing Tumors from Parenchymatous Organs.

Snegisjeff (*Berliner Klinik*) reports a case of echinococcus which he removed from the spleen by the following method: The tumor was the size of a man's head. The incision was in the linea alba. The jet of steam was directed on to the larger convexity of the spleen, and the subadjacent tissue at once became white and dry. A completely bloodless incision, seven inches long, was then made through the splenic tissue, and the tumor peeled from its surroundings by the finger. Whenever hemorrhage, which was sometimes violent, occurred, it ceased at once when steam was directed on to it, and in this way the whole tumor was shelled out. It was then decided to suture the incision in the spleen except at one spot, to pack the cavity with iodoform gauze, to make a small incision in the left hypochondrium, and to stitch the spleen to the abdominal walls. In doing this the splenic artery was pricked and bled profusely, but hemorrhage ceased on the application of steam. Unfortunately the artery became thrombosed, and after ligaturing it the spleen was completely removed. The patient recovered. Although owing to the accident to the splenic artery the intended treatment could not be carried out in this case, yet it is evident that an echinococcus or other tumor could be removed from any organ, instead of extirpating the latter. The steam is best superheated to 150 to 200 degrees C. In the

case of soft organs the steam must not be at high pressure, and must always be directed obliquely on to the bleeding spot. In operations on bones the steam must be at high pressure. — *British Med. Journal*.

Tuberculin in Dermatology.

A. Ravogli, M.D., from his own experience, says:

1. That tuberculin is a great help in dermatology, both as a diagnostic and as a therapeutic means.

2. That in lupus erythematosus it acts remarkably well as a systemic treatment, but, of course, the locality must be treated with external applications.

3. That in a large number of instances I never had any bad effects; and the condemning of tuberculin for fear of spreading tuberculosis is absolutely absurd.

4. That the *old tuberculin* has given more regular reaction, both general and local, than the new tuberculin; and thus far I have found in dermatological work that the *old* is preferable to the new tuberculin.

5. That in cases where no other remedy has any beneficial influence, and the tuberculin causes the disappearing of the eruption, the healing of the ulcers, and improvement of the general condition, this remedy has to be acknowledged as a great remedy.

6. That if relapses occur, after ceasing the use of tuberculin, the remedy must not be blamed. It must be used for a long time, in small doses at long intervals, until recovery is assured. — *Virginia Med. Semi-Monthly*.

The Influence of Fever and Leucocytosis upon the Course of Infective Diseases.

Loewy and Richter (*Deut. med. Woch.*) investigated the effect of an increase of temperature produced in animals by puncture of the brain (Sachs-Aronshon's method) upon the course of chicken-cholera, pneumonia and diphtheria. The animals' temperatures were in this way raised for several days up to or even above 42°C. They found that the animals under these circumstances withstood two or three times the usually

fatal dose of the various bacteria mentioned, but that with 100 times the fatal dose the warmed animals died sooner than their controls. The best results were obtained with the pneumococcus, which can be definitely attenuated outside the animal body by growing at 42°C. For the investigation of the effect of leucocytosis pilocarpin was first of all used, but later, on account of the disturbing poisonous effects of this drug, spermin was used. Intravenous injection prevented the fatal effect of three to four times the usually fatal dose of pneumococcus when the micro-organism was injected later than the spermin, but cure did not occur if the spermin was injected twenty-four hours after the pneumococcus; death was under these circumstances only postponed. The authors conclude that the organism has in leucocytosis and in fever protective mechanisms against infection. — *Indian Lancet*.

Opium and Alcohol Habitués—Some Points in Treatment.

One of the well-established therapeutic properties of the coca leaf is, that it increases the action of the glandular system and that of the kidneys and the skin.

It energizes the muscular system. It produces a lengthening of the respiratory act; has a sustaining effect; is antagonistic to the action of opium; is not only a temporary support to the shattered nervous system, but the tonic and sustaining properties of the leaf give renewed vigor.

It is of the utmost importance when we give a tonic to increase the appetite, that the digestive capacity be increased also, for if more food is taken than can be readily assimilated indigestion, with its attendant evils, is sure to be the result.

Whatever method of treatment may be used in treating opium and alcoholic habitués maltine with coca wine will prove an invaluable adjunct. In a considerable portion of the milder cases no other medicaments will be needed.

Many debilitated patients have a weak and uncertain voice. It is interesting to note the restored self-confidence

that follows when the voice becomes firm and resonant as the result of taking maltine with coca wine. This is due to the coca being a tensor of the vocal chords. Nervous, anemic patients soon after beginning the use of this preparation voluntarily make the statement that they are feeling much better. They gain confidence and feel grateful to the physician for the prescription that has made them feel better.

After the patient has gotten over the habit of taking the drug to which he is addicted, his general sense of well-being increases in weight, and restored self-reliance will render it unnecessary to continue the maltine with coca wine for any great length of time. There is no danger of this preparation becoming a tipple, for it will be no longer needed after the patient is fully restored to health and it can be discontinued without effort. This is not true of the ordinary coca wines, which are merely diluted tinctures and have only the tonic effect of the coca and the stimulating effect of the alcohol, without the digestive principle. Maltine with coca wine is a medicinal preparation, not a beverage.—*Indian Lancet*.

Thymol in the Treatment of the Fever of Tuberculosis.

E. DeRenzi (*Med. Week*, September 10, 1897) finds that thymol is a valuable remedy in the treatment of this often obstinate and troublesome symptom. He finds it to be of distinctly greater value than quinine, antipyrin, acetanilid, and sodium salicylate, as unlike these the thymol has no depressing effect. It is administered in four-grain doses in the form of a powder enveloped in a wafer. These may be given three or four times a day and gradually increased in frequency until sixty or seventy grains are given each day. He finds that tuberculous patients are very tolerant of large doses of thymol and that it is well borne by the stomach, it seeming to favor digestion.—*Medicine*.

It is stated that the mortality from diabetes is seven times as great in locomotive engineers as in other occupations.

Bibliography.

A LABORATORY TEXT-BOOK OF PATHOLOGY.

By HORACE J. WHITACRE, B.S., M.D., Demonstrator of Pathology in the Medical College of Ohio (University of Cincinnati). Philadelphia: P. Blakiston, Son, & Co., 1897. For sale by Robert Clarke & Co. Price, \$1.50.

We are glad to welcome so valuable a book, containing such useful sentiments, especially as it is the product of a Cincinnati man. In the preface the author very rightly argues that diagrammatic illustration is for the most part confusing to the student, and if illustrations are to be studied at all as near an exact representation to the microscopic picture should be shown as possible; and in no other way, either by lectures or diagrams, can any but erroneous ideas be inculcated. In pursuit of this idea, 121 illustrations, about 100 of them photo-micrographs, have been used, and the most typical portion of the various pathologic processes are portrayed by this means. The author cannot but be congratulated on the excellent and untiring work this must have entailed, the original slides being for the most part from his private collection, and many of those prepared for the sole purpose of photography. We venture with confidence the opinion that they will be extensively used in future textbooks for some years to come. Almost all illustrate perfectly the process intended. The photographs most deserving of praise are those of the malignant tumors, almost every type and variety of carcinoma and sarcoma being faithfully presented. Among the various organs, the liver receives the most and best attention, with photo-micrographs of normal liver, fatty infiltration, fatty degeneration (following phosphorus poisoning), nutmeg liver, atrophic cirrhosis, early and late stages; gumma, abscess, pigmented (malarial), and echinococcus. This collection is as a whole the best presentation of abnormal liver processes that has yet come to our notice.

As regards the subject matter, the descriptions are short and clear, all dis-

cussion of vague theories being omitted; indeed, if the book has any fault it is that the author has not given us enough to read. In the description of the various tissues and organs the blood has received considerable attention, and the thyroid gland is discussed under the sub-titles of myxedema, tumor and exophthalmic goitre. The most attention is devoted, of course, to tumors, the classification being a modification of that laid down by Green. In this chapter the theories of tumor formation are printed in less than a page, and include all that is necessary for a beginner to know about this comparatively unknown subject. This section also furnishes a valuable table for the differentiation of sarcomatous and carcinomatous tumors; in fact, several such tables are wisely introduced, notably in distinguishing typhoid and tubercular ulceration of the intestine, and in the differences between lymphatic and spleno-myelogenous leukemia. In the discussion of diseases of the kidney the division into productive and exudative inflammations, as taught in the Eastern colleges, is greatly to be commended.

It must not be thought that the work is wholly for the use of students; hospital internes and any practitioner at all interested in pathology, and even those who have delved deeply into its mysteries, will be delighted with the illustrations, which are alone worth the small cost. In size and shape the volume is well suited for laboratory use. Dr. Whitacre is to be congratulated for having filled a "long-felt want."

MARK A. BROWN.

628 Elm St.

SKIN DISEASES OF CHILDREN.

By GEORGE HENRY FOX, A.M., M.D.
Wm. Wood & Co.

About twenty forms of the more common skin affections of children, treated in concise terms, and abundantly illustrated with cuts and full-page photographic plates, constitute the latest work of this author, whose larger atlas was so favorably received some years since. The work is not exhaustive, but selective, and will be quite acceptable to the general practitioner, who may

read as he runs. The text covers only ninety-four pages. There is a formula covering sixty-five pages. The work of the artists and publishers is of the best.

A. G. D.

The Longevity of Germs in Dust.

In a recent number of the *Annales de Micrographie*, Dr. Miquel gives the results of some interesting observations made by him in respect of the vitality of disease germs. In May, 1881, he took some earth from the Montsouris Park at a depth of ten inches below the turf. This he dried for two days at a temperature of 30°C., and then he placed the dust in hermetically sealed tubes, which he put aside in a dark corner of the laboratory. When taken, the soil contained an average of six and a half million bacteria per gramme. After desiccation the number had fallen to rather less than four million. Sixteen years later, that is to say, last year, he still found three and a half million per gramme, and he was enabled to isolate the specific microbe of tetanus. The inoculation of this soil in guinea pigs determined death from tetanus after an incubation period of two days, showing the remarkable vitality of pathogenic microbes under favorable conditions.—*Med. Press and Circular*.

The Perils of Science.

Accident insurance policies are useful additions to the requirements of our daily existence, but it seems something of a novelty to compel students engaged in laboratory work to belong to an accident insurance company. However, this is the case at the University of Heidelberg. Not only have the students engaged in the laboratories thus to insure themselves, but even those as well who attend experimental lectures in chemistry or physics, for the purpose of covering casualties that are liable to occur under such circumstances. The regulation, perhaps, is a commendable one; nevertheless, it is to be trusted that no carelessness is permitted, or neglect allowed, by which accidents among the students could be caused.—*Med. Press and Circular*.

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LITERATURE WITH FORMULA ON APPLICATION.

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THERAPEUTICS.—When deemed expedient to prescribe phosphorus alone, these pills will constitute a convenient and safe method of administering it.

Pil: Phosphori cum Nuc. Vom.

(W. R. WARNER & Co.)

℞ Phosphori 1-50 gr.
Ext. Nucis Vomice ½ gr.

DOSE.—One or two pills, three times a day, at meals.
THERAPEUTICS.—This pill is especially applicable in ATONIC DYSPEPSIA, depression, and in exhaustion from overwork, or fatigue of the mind. PHOSPHORUS and NUX VOMICA are SEXUAL STIMULANTS, but their use requires circumspection as to the dose which should be given. As a general rule, they should not be continued for more than two or three weeks at a time, one or two pills being taken three times a day.

Pil: Phosphori cum Ferri et Nuc. Vom.

(W. R. WARNER & Co.)

℞ Phosphori 1-100 gr.
Ferri Carb. 1 gr.
Ext. Nucis Vomice ¼ gr.

DOSE.—One or two pills may be taken two or three times a day, at meals.

THERAPEUTICS.—This pill is applicable to conditions referred to in the previous paragraphs, as well as to anemic conditions generally, to sexual weakness, neuralgia in dissipated patients, etc.

Pil: Phosphori cum Ferro et Quinia.

(W. R. WARNER & Co.)

℞ Phosphori 1-100 gr.
Ferri Carb. 1 gr.
Quiniaz Sulph. 1 gr.

DOSE.—One pill, to be taken three times a day, at meals.

THERAPEUTICS.—The PHOSPHORUS increases the tonic action of the iron and quinine, in addition to its specific action on the nervous system. In general debility, cerebral anemia and spinal irritation, this combination is especially indicated.

Pil: Phosphori cum Ferro et Quinia et Nuc. Vom.

(W. R. WARNER & Co.)

℞ Phosphori 1-100 gr.
Ferri Carb. 1 gr.
Ext. Nucis Vomice ¼ gr.
Quiniaz Sulph. 1 gr.

DOSE.—One pill, to be taken three times a day, at meals.

THERAPEUTICS.—The therapeutic action of this combination of tonics, augmented by the specific effect of Phosphorus on the nervous system, may readily be appreciated.

Pil: Phosphori cum Quinia et Digital. Co.

(W. R. WARNER & Co.)

℞ Phosphori 1-50 gr.
Quiniaz Sulph. ½ gr.
Pulv. Digitalis. ½ gr.
Pulv. Opii. ½ gr.
Pulv. Ipecac. ¼ gr.

DOSE.—One or two pills may be taken three or four times daily, at meals.

THERAPEUTICS.—This combination is prescribed in cases of consumption, accompanied daily with periodical febrile symptoms, quinine and digitalis exerting a specific action in reducing animal heat. Patients should, however, be cautioned as to the use of Digitalis, except under the advice of a physician.

Pil: Phosphori cum Digital. Co.

(W. R. WARNER & Co.)

℞ Phosphori 1-50 gr.
Pulv. Digitalis. 1 gr.
Ext. Hyoscyami. 1 gr.

DOSE.—One pill may be taken three or four times in twenty-four hours.

THERAPEUTICS.—The effect of digitalis as a cardiac tonic renders it particularly applicable, in combination with phosphorus, in cases of overwork, attended with derangement of the heart's action. In excessive irritability of the nervous system, in palpitation of the heart, valvular disease, aneurism, etc., it may be employed beneficially, while the diuretic action of digitalis renders it applicable to various forms of dropsy. The same caution in regard to the use of digitalis may be repeated here.

WILLIAM R. WARNER & COMPANY,

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Cincinnati Lancet=Clinic.

A Weekly Journal of Medicine and Surgery.

New Series Vol. XL.

CINCINNATI, JANUARY 22, 1898.

Whole Volume LXXIX.

Original Articles.

BRAIN TUMOR.¹

REPORT OF A CASE OF PSAMMOMA OF THE RIGHT FRONTAL LOBE.

BY ARTHUR L. KNIGHT, M.D.,
MADISONVILLE, O.

Mrs. A. A., a farmer's wife, aged forty, physical condition apparently excellent, the mother of six children, three living, the last one born in 1893.

About a year after the birth of this child she had pains in her back and head and some peculiar nervous reflexes, which I thought to be due to the oncoming menopause, but she menstruated regularly till a few months before her death.

In the summer of 1896 her sight began to fail, and in December, when vision had been very much reduced, she consulted Dr. Geo. Goode, who, upon ophthalmoscopic examination, made a diagnosis of brain tumor. At this time there was no vomiting, neither had there been any; in fact, there never was any vomiting of a markedly cerebral character. She complained of constant pain in the back of the head and neck, but no frontal headache. There were frequent attacks of dyspnea at night, which no medicine relieved in the least.

January 19, 1897. Temperature 99.2°, pulse 80. Blind. Legs numb and painful. Knee-jerk exaggerated. Pain in back of neck. Pupils similar, dilated, not responsive to light.

February 14. Pain in right arm,

and a general eruption looking like an urticaria, which itched.

February 22. Eruption fading, but spots remain constant. Still pain in right arm. Cannot sit up longer than five minutes. Walks only with help, and falls backward and to the right.

May 22. Partial left paralysis. Involuntary micturition, and the mental faculties all in abeyance.

From this time she continued gradually failing. She developed large bed-sores about three weeks before her death, on July 23. Every precaution had been taken to guard against bed-sores.

On February 23, Dr. F. W. Langdon saw her. He confirmed the diagnosis of brain tumor, and suggested that the tumor would probably be found either in the right frontal lobe or in the left cerebellum. The following notes were made at this time:

Mental Symptoms. — Emotional, cheerful; occasional outbursts of uncontrollable anger and queer actions. Articulation good; memory fair but slow; seems rational.

Vision. — Light preception only. Pupils: R. < L. Respond slowly and slightly to light. Ophthalmoscopically: Right disc hazy, swollen; left, white atrophy. Vessels contracted and broken.

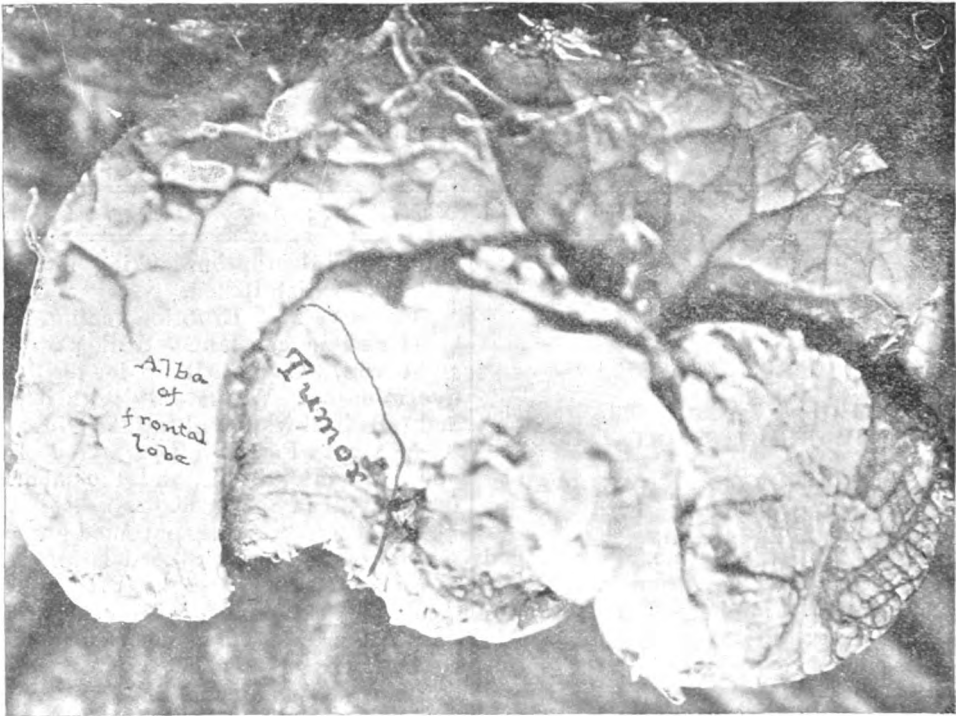
Motor. — Grasp: R., 35; L., 30. No rigidity.

Senses. — No anesthesia to tact or pain; no numbness, but has been. Some itching of nose and skin, probably due to morphine.

Reflexes. — Jaw, elbow and wrist present; knee-jerk much exaggerated, and left greater than right. Rectus clonus in both. Ankle clonus: Right, spurious; left, genuine. No trophic changes.

Urine normal. Heart normal.

¹ Read before the Academy of Medicine of Cincinnati, November 29, 1897.



POST MORTEM, JULY 24.

A tumor springing from the dura, apparently from the centre of the orbital plate, on the right side and extending upward and backward directly into the right frontal lobe, looking like a large solitary tubercle, $1\frac{1}{2}$ inches in diameter and $1\frac{1}{4}$ inches long. The tumor invades the limbic lobe on its anterior segment, completely destroys the right gyrus rectus, and invades the adjacent convolutions. It pushed up the floor of the third ventricle, but did not invade it. The genu of the corpus callosum was pressed upon but not visibly destroyed. On the opposite side the left gyrus rectus was invaded but not destroyed.

Microscopical examination, kindly made by Dr. S. E. Allen, shows this tumor to be a psammoma, the calcified corpora amylacea being held in a spindle-celled sarcomatous mass.

* * *

For some months antedating the earliest noticed failure of vision there were well-marked psychic disturbances.

Violent outbursts of temper, extreme and unreasonable dislikes, "childishness" and lack of inhibition, were, in fact, the earliest symptoms of this tumor.

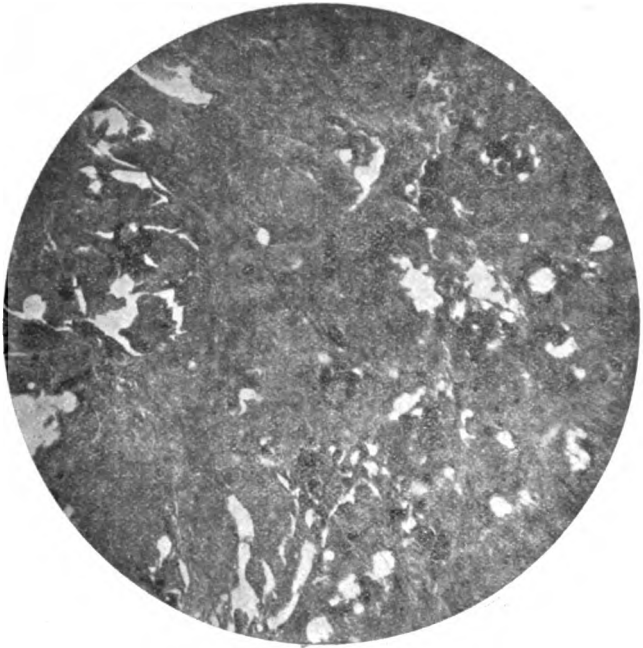
At the funeral of a relative she had to be taken from the church because she expressed contempt for one of the mourners. This is in harmony with the theory that Bianci has advanced, and that he has founded on careful experimental investigation, that the frontal lobes are the seat of the higher psychic functions. The motor centres of the eyes and of the head, on the opposite side, are just behind the pre-frontal lobe, and consequently symptoms from this region would be among the first to follow the psychic, as was true in this case.

DISCUSSION.

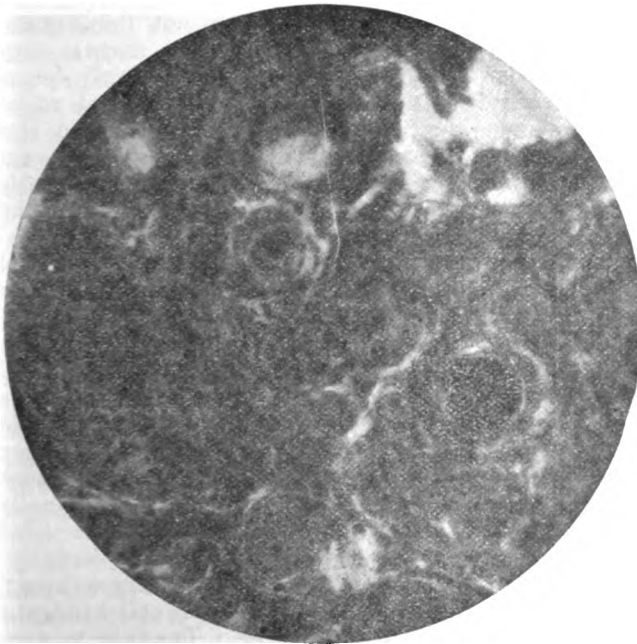
F. W. LANGDON: The case reported by Dr. Knight is one of considerable interest, both from a diagnostic and therapeutic standpoint. I saw this patient on one occasion only, and could

not make so thorough an examination as I desired.

The doctor has already related the leading symptoms of the case, which were blindness of some six months' duration, double optic atrophy, slight weakness of left face and left external rectus, sluggish pupil. The gait was staggering and of the cerebellar type. There had been no vomiting up to that time, but some nausea, with severe headache. The grasp was nearly equal on both sides; the knee jerks hyperactive, left slightly greater than right; also ankle-clonus, spurious on the right, genuine on left. There was a marked emotional, even cheerful, facial expression, which should have perhaps attracted more attention to the frontal lobes as a seat of disease than it did, to my mind,



Photomicrograph $\times 50$ times.
By Dr. M. H. Fletcher.



Photomicrograph $\times 250$ times.
By Dr. M. H. Fletcher.

at the time. However, judgment based upon the emotional state of a patient is a difficult matter when one has had no previous acquaintance with the patient and does not know her normal psychic tone.

My diagnosis at the time was tumor of the left cerebellar lobe or right frontal region, with the probabilities in favor of the cerebellum. I advised that the patient be brought to a hospital, where the progress of the symptoms could be more carefully studied with a view to exploratory operation. I do not think that any inter-cranial operation is advisable in such cases upon one examination of a patient.

J. Purves Stewart, of Queen's Square Hospital (London), has recently reported two cases illustrative

of the importance of contra-lateral headache in cerebellar localization. That is to say, a headache due to disease of the *right* cerebellar lobe is likely to be referred by the patient to the *left* frontal region, and *vice versa*.

Williamson, of Manchester (England), has recently tabulated in *Brain* an analysis of fifty cases of tumor and abscess of the frontal lobe, of which thirteen were considered operable. Three actually came to operation, and of these two were successful. This would seem to indicate the importance of more careful localization and more frequent operation in tumors of the frontal lobe.

Cross-Saddle Riding for Women.

The masculine world is now quite accustomed to the cross-saddle position assumed by women on "bikes," and thus it may be that the side-saddle for horse-riding is doomed to pass away. The fair riders in California, at all events, have made up their minds upon the subject. As a preliminary they have formed a Cross-saddle Club, each member of which pledges herself to ride on horseback in no other style. They hold that it is the most sensible, comfortable, and only rational position by which a horse can be properly and gracefully ridden. The difficulty as to costume, we learn, is easily met by the adoption of the divided ulster—whatever that may be. After all, the whole matter is only one of sentiment based on custom. Bicycling women have in this country been laughed out of their "bloomers," mainly because such a costume did not commend itself to their male companions. Perhaps, therefore, if women appeared on cross-saddles in a becoming dress the innovation would soon cease to be noticeable, and another step towards the "emancipation" of the fair sex would be gained.—*Med. Press and Circular*.

HEALTH Commissioner McShane, of Baltimore, has strictly forbidden the use of ice from unclean ponds.

THE United States Government has prohibited the entrance of immigrants suffering with favus.

PURE AIR.

BY GEO. J. MONROE, M D.,
LOUISVILLE, KY.

In house, shop, office, store, schools, churches, halls or elsewhere where the human family lives or congregates—we should see to it that the air is pure. Pure air is essential that we may live, and the purer the air the more joy we will get out of life and the longer we will live. If a manufacturing establishment where thousands congregate and remain for hours is poorly ventilated, or if pure air does not enter it freely, we will have as a result thousands in poor health. If our school-rooms are permeated with vitiated air we have sickly school children. If our stores and other places of business have not good, fresh, wholesome air we have poor and unfortunate business men and clerks. Men or women who are obliged to live in a poisonous atmosphere are irritable, cross and disagreeable, nearly always dyspeptic, and are more apt to be failures than their next-door neighbor, who, perchance, has not the natural business qualities they have; they breathe a pure air, however, hence their brains are clear, active and under complete control. Families who live in poorly ventilated houses are always cross and snarly. They are constantly quarreling amongst themselves, and always complaining of some physical ailment. Headache is probably one of the most frequent accompaniments of living in impure air. Digestion is usually poor, and constipation generally exists. Any one living in a poisonous atmosphere is devoid of energy. They desire to sleep, or at any rate to remain quiet the most of the time. Their sleep is broken; they are tormented with horrible dreams. When they finally waken in the morning they are tired and worn out. They have a disagreeable taste in their mouths, tongue furred, and almost always a frontal headache and some backache. The skin is dark and lifeless, the eyes surrounded by a dark ring. The eye-sight very soon becomes affected. An oppressed, de-

pressed feeling predominates throughout the entire system. I believe that impure air will produce a sluggish condition of the liver; in fact, we seldom ever have poor digestion and an active liver at the same time. The one sympathizes with the other. Poor digestion causes a sluggish liver, and, *per contra*, a sluggish liver causes poor digestion. Neither do we have, as a rule, a diseased stomach and liver without having more or less trouble with the kidneys. This kidney trouble may be simply sympathetic, or we may have organic disease. We should see to it that all public as well as private buildings should be well ventilated.

In order to have pure air enter buildings it is necessary to have pure air outside; certainly, if the air is contaminated with filth, decaying animal or vegetable matter, or poor sewerage, manure and other nuisances, we have difficulty in obtaining pure air, and the result is disease. This being the case outside, we need not expect pure air inside.

The immense amount of smoke which we have in every city from the combustion of soft coal evidently is a disease-producing element. How often we notice sore throats, coughs and other nasal and bronchial troubles so soon as we light our fires in the fall or early winter, when we begin to burn soft coal, and natural gas is much worse. I am not certain that coal smoke shortens life very much, but I am quite certain it makes many a one a partial invalid during the winter months. I have not failed in twenty years of having a cough begin every fall when soft coal fires were started and continue all winter. I was told by the Nestor of medicine, N. S. Davis, of Chicago, over twenty years ago, that I had better arrange my business for my departure from this earth, as I would not live a year. I am still living, and I do not think this winter's cough is going to shorten my life very much, yet I must admit it is very annoying. I attributed this cough formerly to the effect of cold weather, but I am now satisfied it is occasioned from soot and the smoke of soft coal.

Any one can easily prove that the air is saturated with coal soot and smoke. Let him clean his nose thoroughly before leaving home. Let him walk a mile to his place of business and again clean his nose, and he will be surprised at the amount of soot that has collected upon the mucous membrane. This foreign substance cannot be conducive to health. Some enterprising and inventive genius, it seems to me, ought to be able to invent some method whereby all this carbon with which the air is loaded could be burned or destroyed. I understand that some such invention has been made and is in use in some of our large cities. If it is a success it ought to be adopted in every city. I doubt if it as yet has been a complete success.

School-houses and churches should especially be well ventilated. The people are seeing the necessity of this, especially in schools. There is not yet much attention given to churches and theatres. How common it is to go to church and find a musty, sickening odor! The atmosphere is saturated by all or nearly all of the carbonic acid gas which has been exhaled the Sunday previous. During the week the church has been hermetically sealed; no air has been allowed to enter. With this amount of carbonic acid gas no wonder the congregation have been inattentive and sleepy. If the weather is cold a great fire is built, burning up the little oxygen that still remains in the room. This fire also stirs up the carbonic acid gas which has accumulated for some time previous. No wonder that the ministers become exhausted in delivering their Sunday sermons, and no wonder that the congregation are sleepy and listless. Ask many a one who has attended church on Sunday what the sermon was about, and they cannot possibly tell you. This is simply on account of the impure air in the church acting as a narcotic to the brain. No one can be a good, industrious and attentive Christian and attend church where the air is impure.

We keep our houses in the winter time as tightly closed as possible in order to retain the artificial heat of our

stoves, grates and furnaces. We do not take into consideration the vitiated air in which we are living, which is slowly but surely destroying our lives, destroying our energy and ambition, and materially affecting our peace of mind, making us discontented and unhappy. Many often wonder why they feel so badly in the morning when first awakening, or on getting up; "tired" does not express the feeling. If they would reflect a moment they would remember that every avenue where outside air might enter the sleeping-room is hermetically sealed. The windows are never opened, or at any rate at night. The occupants of the room have been breathing and re-breathing the atmosphere of the room until all of the oxygen of the air has been exhausted. They are simply trying to breathe carbonic acid gas. This gas, it is well known, poisons the blood. It has a tendency to produce a sleepy condition. If there is much of it it will not sustain life. No wonder a person is tired who has for any length of time breathed this gas. Many, from an excess of this gas, pass into that sleep which knows no wakening. Witness the great number who died from it in the "Black Hole" of Calcutta. So many were confined in this one room, which only had one small window for the entrance of air, that the air was soon contaminated with carbonic acid gas from their own lungs that there was not sufficient oxygen to continue life. Only a few out of the hundred and forty remained alive.

Carbonic acid gas may be further illustrated by its accumulation in deep wells and in cellars and mines. If there is not sufficient oxygen to sustain life we can have no combustion. If a candle will not burn the genus homo had better keep out of it. If it will put out a candle it will put out life, for where a candle will not burn life cannot exist. Carbonic acid gas becomes sometimes so heavy that you can dip it as well as you can water. This experiment may be proved by dipping a pail of it from a deep well where it has been accumulating for any length of time. Place a dozen lighted candles in a trough at an

angle of 45 degrees. Turn your carbonic gas in at the upper end of the trough and you will find every light will be extinguished. This, of course, is proof positive that life cannot continue in an atmosphere saturated with carbonic acid gas.

I do not think it possible for anybody to have too much pure air. We should endeavor to have this pure air by all means in our power. Give us pure air and pure water and we can withstand impurities of other kinds with a greater degree of strength than we can if the air is contaminated and the water polluted, which we very often have to drink. Good Lord deliver us from the many impurities we have to contend with.

442 Walnut Street.

Treatment of the Umbilical Cord.

The dressing recommended by Rouchon, in the *British Medical Journal*, consists of a bandage or wad of absorbent wool soaked in 5 per cent. picric acid (two and a half grains to the ounce of water), and then carefully squeezed out, and finally covered with aseptic cotton without the interposition of any impermeable material. He states that it ensures antiseptis, obviates the too rapid desiccation which produces a brittle stump liable to cause hemorrhage on the slightest provocation, does not hinder the separation of the cord on the sixth or seventh day, and leaves then a hard and complete cicatrix. It is furthermore absolutely harmless. The dressing should be changed every two or three days, more often if soiled with urine; if necessary, however, a single dressing will suffice. The more often it is changed the later the separation of the cord, which is usually on the fifth to the seventh day when this method is followed.—*Med. Council.*

It is said that if the patient is allowed to inhale vinegar after an operation, while coming out from the anesthesia, the nausea and vomiting will be prevented. Pour it on the mask or towel and let it be inhaled as ether is.—*Med. Council.*

TUBERCULOSIS: A CATECHISM.

BY H. H. SPIERS, M.D.,
RAVENNA, O.

What is tuberculosis? A constitutional disease dependent largely on the evils of civilization and governed by the following law: The death-rate from tuberculosis is in direct ratio to suspension of atmospheric influence.

What is a constitutional disease? The word constitutional is significant. When that prince of cynics, Thomas Carlyle, took a walk for the good of his health, he spoke of it as a "constitutional"—conveying the idea, as the writer thinks, that physical exercise in the open air builds up the entire system.

When one speaks of a constitutional disease he means a systemic ailment that primarily is taking away or destroying the life or vigor of the entire organism.

The word constitutional is used in contra-distinction to local. Should one in the prime of life gradually decline in physical and mental vigor, we properly designate this a constitutional disease. Should one have an ailment in one part or member of the body we properly designate this a local disease.

In medicine constitutional and local are relative terms used to point out the extent of invasion. If applied to treatment they respectively represent the whole or part of the system for which the remedies are taken or applied.

From the very nature of the case, when one has a constitutional disease he frequently has local symptoms. *Per contra*, when one has local disease he frequently has constitutional symptoms.

Our system is so connected and complex, one part being dependent on another, that when one member is diseased the entire system suffers; when the system is diseased individual members suffer in a greater or less degree.

These remarks may seem commonplace. They are common language used to make plain the nature of a constitutional disease.

The writer takes it, a constitutional disease is a disease of the entire organism, and that primarily.

Is tuberculosis a constitutional disease? On this, as many other subjects, writers fail to be lucid. If we attribute the diseased condition found in tuberculosis to the action of the germ tubercle bacillus alone, as is the common sentiment of the medical profession to-day; if the tubercle bacillus capture and kill its subject, as a fox a lamb in the open, tuberculosis may be regarded a local or infectious disease. The writer is unwilling to accord so potent an influence to the plant.

We are told one takes tuberculosis as he takes measles, etc. The inception of tuberculosis is a question of exposure. As the majority of mankind have measles at some period of their existence, so the majority have tuberculosis. As some do not "catch" measles, so some do not "take" tuberculosis. This seems very simple.

Is this view strictly correct? Let us examine this subject a little more closely. The tubercle bacillus is a plant growth. Like all vegetable organisms, the plant must have a soil in which to develop. True, the soil for the vegetable growth is found in a living animal, but please observe the soil *per se* is a *dead or partially disorganized tissue*. Must it not, of necessity, be so?

Science tells us that plant life can assimilate only the simplest forms of food; that tissue of the living animal is food not in its simplest form. Therefore, *the living tubercle bacillus per se cannot take root in the living animal*. Hence, a soil must be prepared before the reception of its host.

For an author to state that tuberculosis is caused by a germ, and is received in the same way as measles, etc., is, to say the least, an expression of ideas with little reflection. The method of infection in measles and tuberculosis is very different. Is it necessary to prepare a soil for the inception of measles? Can we in any way so prepare a soil? Is a soil prepared in every case of tuberculosis before the bacilli take root? Yes, in every case. Can we so prepare a soil? That we can must be evident to every observer.

Illustration: Take a number of monkeys from the forest. In their

natural state tuberculosis is unknown among them. Place these monkeys in confinement, with poor ventilation, for a few days. It will be found that not some but *all* have the precedent state or soil necessary for the growth of tubercle bacilli. It will be found in a short time that not some but *all* have tuberculosis.

In an exposure to measles some few escape; not so in tuberculosis, if the soil be prepared.

It may be asked, Does not confinement *per se* aid in the production of the precedent state? This is answered most emphatically in the affirmative.

We have shown suspension may take place from within or from without (LANCET CLINIC, August 28, 1897). We have shown that exercise in the open air prevents the precedent state (the New Albany Medical Herald, October 18, 1897). To now speak of confinement as an aid to the precedent state seems superfluous. Confinement or lack of physical exercise, must of necessity be an aid in its production.

One writer says tuberculosis is a disease of the nervous system. He reasons: In every case of tuberculosis the nervous system is involved.

Another might say tuberculosis is a disease of the muscles, for in every case the muscles are wasted.

A third might say it is a disease of the osseous system, etc., etc.

The truth lies here: Tuberculosis is not a disease primarily of any one isolated system, but *is a constitutional disease. As such it includes everything in the physical make-up of the organism.* The truth of this assertion can be verified by any observer or pathologist.

Let us for the moment lay aside the idea of germs and calmly consider the pathological condition as found. One has phthisis pulmonalis—tuberculosis of the lungs; another, tabes mesenterica—tuberculosis of the mesentery; a third receives an injury, an amputation is performed, and tuberculosis develops in a partially healed stump, etc., etc. It is seen the pathological condition is found in many organs of the body. While one organ—the lung

—has a preëminence in this regard, yet the fact of finding tubercle in every organ would lead one to suppose a constitutional dyscrasia preceded the pathological condition. In other words, that tuberculosis is a constitutional disease *before the formation of tubercle.*

Why one organ is predisposed in one individual and another in another is perhaps due to an innate weakness of that particular organ.

It is generally found that when tuberculosis of one organ causes death the evidence of the disease is not local, but systemic, showing a condition of system preceded the local condition.

But, say some: "How can these things be?" Does not the bacteriologist inject tubercle bacilli cultures into the healthy living guinea-pig, and do they not grow? Why should one say a soil must be prepared?

Another question: "Do these bacilli naturally grow in the tissue of the healthy living guinea-pig?" Is not the method of injection an unnatural method? In seeking natural results why not use natural methods? For tubercle bacilli to grow in a natural or spontaneous manner *a soil must be prepared.*

Let every biologist in the land take this truth to his laboratory and ponder it in his heart. Let him ponder *with the slide of his microscope intact.* Then will he truly learn the science of life.

How to Use Politzer's Bag.

The *Presse médicale* for December 8 gives the following directions: Blow the nose carefully to rid it of mucus. Take a little water into the mouth and hold it there for the time being. Insert the end-piece of the tube deep into the right nostril, and hold it there with the fingers of the left hand, at the same time closing the left nostril with the left thumb. Then, with the right hand, squeeze the bag vigorously at the very moment of swallowing the water. Withdraw the nose-piece before allowing the bag to expand again. The insufflation should be practiced two or three times in succession.—*N. Y. Med. Journal.*

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DR. J. C. CULBERTSON,

317 W. SEVENTH ST., CINCINNATI, O.

CINCINNATI, JANUARY 22, 1898.

Editorial.

TO BE OR NOT TO BE.

To live or not to live, that is the all-important question to scores and hundreds of qualified physicians throughout the land.

An evolution of serious import is going on. A lessening of amount of sickness, and improved methods of caring for those who are ill are pressing upon the sensitive areas of the pocket nerve. Paralysis is taking place, and conditions of how not to live in and by an active practice of medicine is a problem confronting the many.

The medical profession is endeavoring to solve the question by an erection of bars to the entrance of medical study. This is well, and will have a good effect. Preliminary standards of more exacting character are in sight, but physicians themselves all over the country must take a hand and use their influence in deterring men and women from beginning a study of medicine. This can often be done to great and good advantage to the inquirers as to the way to begin. Tell of the actual capital re-

quired to get through a four-years' course, adding 50 to 100 per cent. for the unforeseen incidentals that are sure to be called for. Then capital required to live in a becoming manner for four to six years while waiting for people to find out that he is a qualified physician.

In consulting with those who propose to begin a study of medicine, say point blank and square toed that no man has a moral right to get married and then begin a study of medicine. This statement is brought out by an observation of a large per cent. of married men in medical college classes.

The writer has on several occasions been called in to see a student sick, or student's wife or child ill, sometimes finding them living in one or two rooms in abject penury. It is not a disgrace to be poor nor an immoral thing for a young man and woman to get married, but it is an outrageous outrage upon humanity for a man to marry a trusting young woman and then ask her to share his trials and tribulations while studying to enter a profession. Furthermore, no young man can do justice to himself or his studies, have the care of a wife and babies on his mind, and at the same time be in financial straits. It can't be done. To be a reputable physician a man must have a fair amount of discriminating judgment. This is not shown to be present in any reasonable degree when marriage is entered upon and afterwards a study of a profession.

It is not denied that in some instances gratifying success has followed the conditions under consideration, but in many other cases failure of a dismal order has been an outcome. Some things that were possible forty or fifty years ago are not now feasible. Then two short courses of medical lectures, no preliminary preparatory studies, little capital and an

easy examination admitted men to a medical degree. Not so now. A new science has been born, the time limit doubled, preliminary studies and examination, large expense account, and less professional work to be done when through, are conditions demanding attention. Yet further, methods of practice have greatly changed. In times gone by there were few hospitals, and these were for the poor, and were known as for the benefit of paupers only. Now there are hospitals of all sorts, public as well as private. Patients are drummed for these institutions all over the land, until little is left for the general practitioner.

* * *

Recently a pharmacist said to the writer that the business of his calling had so fallen off that many of the very best men in the business were on the very ragged edge and in hard lines; that there was a temptation to prescribe, use substitute goods and cheap preparations because they yielded a better profit; that financially they were as bad off, or worse, than physicians. His statements are perhaps true. Men know the ills and shortcomings of their own class better than others.

On general principles every one should magnify the virtues and importance of his own calling. Medicine and pharmacy have brought many blessings to mankind at a serious expense to their own votaries, for which there is little or no compensation beyond a sense of personal gratification at being able to lessen pain, prolong life, and thereby add to the sum of human happiness.

A lessening of the number of physicians should be accompanied by a corresponding shortening of the crop of pharmacists, all of which may be accomplished through State requirements.

Inviolable laws of trade and com-

merce are at work and affecting all lines of living and business.

The hospital habit has been established through inoculations in every directions. Would-be philanthropists see in them a possible channel for a disbursement of surplus accumulations. This cannot be stopped, for men have a perfect and unquestioned right to use their money for this purpose if they choose to do so. Furthermore, the hospital field for an overflow of feminine sympathy is thereby provided, whereby some good is done.

The revolt against hospitals and free dispensaries is extending throughout the land, reaching into all country districts. From this antagonism there will be evolved some new conditions of professional life which may not now be visible. Perhaps a class of professional consultants will be developed, separate and distinct from those known as practitioners, and caste formations constituted. The writer does not like to recognize the idea; others will take to it. In any event, old medicine and methods are going into history. The new science and practice will take the field and hold sway over physicians and people. A frequent heaving of the lead-line to determine depth and presence of obstructions will have to be invoked at intervals in order that the craft may be kept in safe waters.

INFLUENZA.

This disease, in a mild form, is quite prevalent in this vicinity. In a few instances, where other organic troubles were present, fatal results have ensued.

Epidemic influenza is so prostrating in its effects upon the nervous system that patients should be required to abstain from all excesses of work of every kind until recovery has taken

place. Catarrhal conditions are quite apt to be followed by serious sequelæ. Rest, stimulants and easily assimilated nutrients are usually followed by favorable terminations.

THE OHIO MEDICAL LAW.

The Hamilton County Prosecutor is busy. Within the last few days there have been more than twenty indictments found by the Grand Jury against those who are engaged in practicing medicine illegally. One or more are in jail, unable to give a small bond. Those who are indicted have against them a sufficient proof to warrant a belief that they will be convicted.

The good work will go on until the people are relieved of the presence of a class of persons whose very recognition is a menace to the ignorant, and a readiness to become copartners in guilt with those who, in the eyes of the law, are engaged in criminal occupations. The Ohio law is an effective instrumentality, and as such has been declared by the State Supreme Court to be constitutional.

A HOSPITAL ESTABLISHMENT.

W——, January 18, 1898.

DR. J. C. CULBERTSON, Cincinnati, O.

Dear Sir:—One of our firm is preparing a paper on the subject of "Hospitals." W—— is a well-to-do town, over one hundred years old, with about seven thousand inhabitants and with twenty-two physicians; the question of having a hospital is being seriously considered by the citizens. The purpose of this paper is to present all the information that can be gained on this subject and to argue in favor of such an institution. As a public-spirited man, we should value any suggestions that we might receive from you very much. In order not to put you too much trouble, we will ask you a number of questions, which, if answered, will probably be sufficient for our purpose:

No. 1. In a wealthy town like W——, over one hundred years old, population seven thousand and having twenty-two physicians, is it desirable to have a hospital?

No. 2. If a hospital were to be built, what is the minimum sum that, in your opinion, would be required to make it effective?

No. 3. Would it be advantageous or disadvantageous to the physicians to have a hospital in this town?

No. 4. Is a hospital liable to be dangerous to the health of residents in the immediate vicinity?

No. 5. Should physicians be paid for the services they render in connection with a hospital?

No. 6. In your opinion, which would be better for the community, for business men to organize and manage the hospital, with the exception of receiving contributions from the citizens, or would it be better for the physicians to combine and organize such an institution?

Any information that you might give us will, of course, be credited in the paper.

Yours very truly,
M—— & Co.

CINCINNATI, January 20, 1898.

The M—— Co.

Gentlemen:—In a town like W—— there is little or no need for a hospital. A small infirmary, with sick-room attachment, located just outside of the town proper, is what may be needed, and this for the homeless poor only.

The building should be absolutely plain, and as inexpensive as possible, so that in a few years it could be destroyed by fire, with little material loss, and a new structure erected.

It is disadvantageous to physicians to have a hospital in W——.

A hospital is not liable to be dangerous to the health of residents of any town.

Physicians should be paid for their services in a hospital in a town like W——.

Such institutions as referred to should be managed by a mixed board of physicians and laymen. No objection to women members of the board; think they are advantageous when known as women of good, sound judgment and discretion, not emotional or erratic.

Hospitals have a natural tendency to educate those in moderate circumstances down, and not up; to dependence and not to independence. For the good of society and upbuilding, it is better to get along without a hospital just

as long as possible, helping the very poor in a judicious way, and then a putting of them in a way to help themselves by providing employment according to their qualifications.

Many thousands of dependents in infirmaries, homes and other eleemosynary institutions can be made partly self-sustaining by a giving of employment for which they are qualified and capable. Charity should be very discriminating in its work. I would not that any suffer, but there are very few who cannot do something. For the paralytic, tuberculous, those suffering from malignant disease like cancer, last stages of syphilis and the like, care must be provided, and best in a little cheaply-built infirmary with a few surrounding acres of ground. Two separate cottages for the two sexes, and not on same grounds or near by a children's home cottage, the latter having a maternity room; one such room would be sufficient in W—.

Do nothing that savors of a premium on idleness or shiftlessness. Encourage thrift by compensation for labor performed by the poor. If there is no work in sight for them, provide it; make work for them, even if not seemingly necessary; it is required for them. They have not the intellect to think for themselves in many cases. Hence, some one must think and do for them in the way indicated.

I am, yours truly,
J. C. CULBERTSON.

EDITORIAL NOTES.

REPORT OF THE HEALTH DEPARTMENT OF CINCINNATI.—Following is the statement of infectious and contagious diseases for week ending January 14, 1898:

	Cases.	Deaths.
Measles.....	25	..
Diphtheria.....	4	1
Scarlet Fever.....	13	..
Typhoid Fever.....	3	4
Phthisis Pulmonalis.....	7	9
Membranous Croup.....	4	1
Pertussis.....	13	..
Varicella.....	6	..
Total.....	75	15

The mortality report for the week ending January 14, 1898, is as follows:

Croup (membranous).....	1
Diphtheria	1
Influenza.....	2
Typhoid Fever.....	4

Other Zymotic Diseases.....	3—11
Cancer.....	10
Phthisis Pulmonalis.....	9
Other Constitutional Diseases....	5—24
Apoplexy.....	2
Bright's Disease.....	1
Bronchitis.....	7
Convulsions.....	1
Gastritis and Gastro-Enteritis.....	3
Heart Disease.....	6
Meningitis.....	6
Nephritis.....	4
Peritonitis.....	3
Pneumonia.....	16
Other Local Diseases.....	15—64
Deaths from Developmental Diseases..	17
Deaths from Violence.....	3
Deaths from all causes.....	119
Annual rate per 1,000.....	15.27
Deaths under 1 year.....	25
Deaths from 1 to 5 years.....	12—37
Deaths during preceding week.....	112
Deaths corresponding week 1897.....	145
Deaths corresponding week 1896.....	141
Deaths corresponding week 1895.....	117

Academy of Medicine of Cincinnati.

TELEPHONE 1981.

The above number (1981) belongs to the telephone placed in the Academy's hall for the *use of its members* during meeting nights.

January 24: "The Electric Light in Genito-Urinary Diseases," Dr. W. B. Weaver; "Ossification of the Choroid," Dr. David DeBeck.

OBSTETRICAL SOCIETY OF CINCINNATI.—At the annual election the following officers were chosen: President, Dr. E. S. McKee; Vice-President, Dr. W. D. Porter; Secretary, Dr. Wm. Gillespie; Corresponding Secretary, Dr. M. A. Tate; Treasurer, Dr. Geo. E. Jones; Librarian, Dr. C. L. Bonifield.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.—The ninety-second annual meeting of the society will be held on January 25, 26 and 27, 1898, in the City Hall, Albany, commencing at 9:15 A.M., on the 25th and ending at 1 P.M. on the 27th. Communications relating to the presentation of papers or to any changes in this provisional programme, should be sent to the Business Committee, of which Willis G. Macdonald, 27 Eagle Street, Albany, is the Chairman.

Obituary.

SAMUEL R. EVANS, M.D.

Dr. Samuel Ridgley Evans died Sunday, January 16, at 1:45 P.M., of apoplexy while sitting in his chair.

Dr. Evans was born at Hillsboro, Ross County, O., April 21, 1819, and graduated from Starling Medical College in 1848. He began the practice of his chosen profession at Amanda, Ohio, removing from there to Middletown early in his career. He continued in active practice up to his death, having visited a patient five miles in the country and returning about noon, remarking that the patient was not as sick as her doctor. The summons came after he had eaten rather a hearty dinner and was resting in his chair.

Dr. Evans has been a sufferer from indigestion and vertigo for a year or two. Aside from this he has been one of the most active of men, and was closely identified with the growth and development of Middletown. He had accumulated considerable property during his greatest activity, but owing to the unsuccessful turns that come to many of us in later years he had to part with most of it.

Dr. Evans was married to Emma Gaunt, who was called from him by death after five years of married life, leaving an infant son, now Dr. John G. Evans, who is an active physician in Winfield, Kansas.

DIET IN CHRONIC INTESTINAL CATARRH.—An exclusive milk diet should have a trial in every case. Skimmed milk can be taken in larger quantities and with less repulsion, and is therefore to be preferred. The exclusive milk diet can be varied with butter-milk, koumiss, or wine-whey; and fruit juices, as orange juice, lime juice, or tamarind water, please the patient without doing harm. In the case of adults as well as children the milk is made more digestible by diluting it with barley- or rice-water, or by adding transformed farinaceous food to milk in the form of Mellin's Food and other foods of this class.—From "System of Medicine," William Pepper, M.D., LL.D.

PUBLISHER'S DEPARTMENT.

ART FOR THE PEOPLE.—There are few things that go farther toward making the home attractive and pleasant to live in, than good pictures. They brighten the walls, often tell an interesting story, and always, in their selection, show something of the taste of the people who own them.

To put the work of really famous artists within the easy reach of a great number, is a praiseworthy undertaking, and this is just what The Procter & Gamble Company, the makers of Ivory Soap, are doing. Not content with the commonplace and cheap pictures that serve so many in the exploitation of their goods, this company has spared neither expense nor time to secure the best. It does not need the eye of an expert to appreciate the exceptional beauty of the copies of paintings and drawings that they are using, to keep their friends informed of their product. He who runs may read in these pictures the evidences of taste and knowledge in the selection of the artists, and appreciate the large sums that must have been expended for the original pictures they so successfully reproduce in colors. Such pictures as "Waiting for the Stage," by Percy Moran; "A Summer Girl," and "At Home," by Alice Barber Stephens; "A Pink Rose," by Leon Moran; "Ready for Battle," by Francis Day, and "Autumn Leaves," by W. Granville Smith, are the kind we are accustomed to see in the art galleries or occasionally in the pages of the leading magazines. They are not the sort usually employed for advertising purposes. It may fairly be said that The Procter & Gamble Company are serving a double purpose. They are not only calling attention to Ivory Soap, one of the best and most favorably known articles of domestic consumption, but they are at the same time affording pleasure and better acquainting the public with first class contemporary art. In the printing of these beautiful pictures, they have spared no expense to make them as near the originals as possible, and the rare delicacy and harmony of the tints of the reproductions have only been obtained after thorough and exhaustive experiments. To better insure completely satisfactory results, they sent an expert to Europe, to study and report on the color processes of the famous European printing establishments, and they have also made many tests in a fully equipped plant with a view to perfecting the preparation of the plates and presses for this particular work.

When it is known that some of the editions of single prints include as large a number as four million copies, some idea of the mechanical resources and the cost involved is apparent. It is only in line with the governing principles of all the business of this famous house, to put the best obtainable material and work into anything they place before the public. A true

idea of the real value of one of these color pictures may be readily obtained by putting one of them in a simple frame, under glass. It is then very difficult for even a connoisseur to distinguish them from paintings in oil or water color with which they may be compared.

MADE IN AMERICA.—The supplementary collective investigation of the American Pediatric Society, which embraced more than seventeen hundred cases of unmistakable laryngeal diphtheria, showed conclusively that the antitoxin which is now most generally employed and which yields the highest rate of recoveries is a domestic product: Mulford's Concentrated Diphtheria Antitoxin. The report retained 1,704 cases, of which 40 per cent. had been treated with Mulford's.

In the cases so treated the mortality was one-third less than in the cases treated with all the other antitoxins combined. Physicians who are not already familiar with this product should not fail to write for full particulars and recent brochure to H. K. Mulford Company.

Lactation Atrophy of the Uterus.

Vineberg (*American Journal Med. Sciences*) concludes as follows:

1. Modern researches tend to prove that post-puerperal involution consists chiefly in a retraction and contraction of the individual muscle-fibres, whereby the whole uterus was reduced in size.

2. When involution goes to its full completion the uterus is reduced to a size smaller than that of the nonparous organ.

3. This condition of complete involution is known as post-puerperal hyperinvolution. It is principally seen in nursing women, and from this circumstance has received the cognomen *lactation atrophy*.

4. The so-called lactation atrophy is a normal and desirable condition. It is temporary in its duration, but very rarely under favorable circumstances may become permanent.

5. When the parturient is unable to perform the function of lactation it is the duty of the physician to endeavor to bring about hyperinvolution by other means at his disposal. An observance of this course will prevent many a woman from developing a host of gynecologic affections which frequently result from imperfect involution.

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of November 29, 1897.

The President, W. E. KIELY, M.D.,
in the Chair.

W. EDWARDS SCHENCK, M.D., Secretary.

[TELEPHONE NO. 1981.]

DR. ARTHUR L. KNIGHT exhibited a brain containing a tumor *in situ* in the right frontal lobe; also microscopic demonstration of the same which showed it to be a psammoma (see page 69).

Fibro-Sarcoma of the Nose.

DR. J. A. THOMPSON: Mrs. S., Greenup, Ky., referred by Dr. Brady. Patient aged forty-six, mother of eight children, six living; has always had good health. In December, 1896, she noticed the nostrils stopped up as if with a bad cold. There was sneezing, and a watery discharge. About March, 1897, she began to have pain and headache. In May she had very severe headaches. About once a week she suffered with sick headache, confining her to bed. By June 1, the growth in the nose had become large enough to interfere with swallowing. She had another of the very severe headaches, and sent for Dr. Brady, who then saw her for the first time. No bleeding, not much discharge in the throat, no pain other than the headaches, and sometimes a little across the nose.

Dr. Brady brought her to my office June 7, 1897, and the growth was removed. When first examined a whitish tumor, ulcerated at the lowest portion, could be seen, hanging into the pharynx behind and below the soft palate. This growth filled the naso-pharynx so that a post-nasal examination was of little value. The right nostril was closed by a large spur growing from the septum. This was anterior to the growth and prevented our seeing the base of it. The spur was cocaineized and removed. It could then be seen that the base of the

growth was attached to the middle turbinated body. The wire of a cold wire snare was passed through the inferior meatus down into the throat. This wire was guided by the finger introduced through the mouth, over the growth and was slowly tightened. The growth was exceedingly resistant, and after its base had been compressed was so firm that the tube of the snare was split by the wire, the handle was bent and finally a binding post pulled out before the growth was cut through. The loop of the galvano-cautery snare was then introduced and the remaining portion burned through. The growth was removed through the mouth. The patient insisted upon returning home immediately, and the after-treatment was conducted by Dr. Brady. There was a microscopic examination of a portion of the removed tumor made by Dr. Mark Brown. He reported it a pure fibroma.

November 26 the patient returned. She said the right nostril had never been clear since the operation. In the latter part of October the tumor had recurred and the patient again began to suffer from headaches. There had been little or no discharge from the nostril or into the throat. There had never been any bleeding. When examined the growth presented at the nostril anteriorly. There was a projection the size of a pigeon egg posteriorly in the nasopharynx. This portion could be seen through the left nostril and a portion of it was removed from that side to enable the patient to breathe through one nostril. The anterior portion of the tumor in the right nostril was removed with the cold wire snare and given to Dr. Mark Brown for microscopical examination.

These specimens showed it to be a fibro-sarcoma. It was determined to remove the second growth by means of an external incision to give free access to the bone to which the base was attached. This operation was made at the Presbyterian Hospital, November 30, 1897. Those present and assisting were Drs. Oliver, Haag, Hall and Brady. The right nasal bone was resected and the whole right side of the nose turned

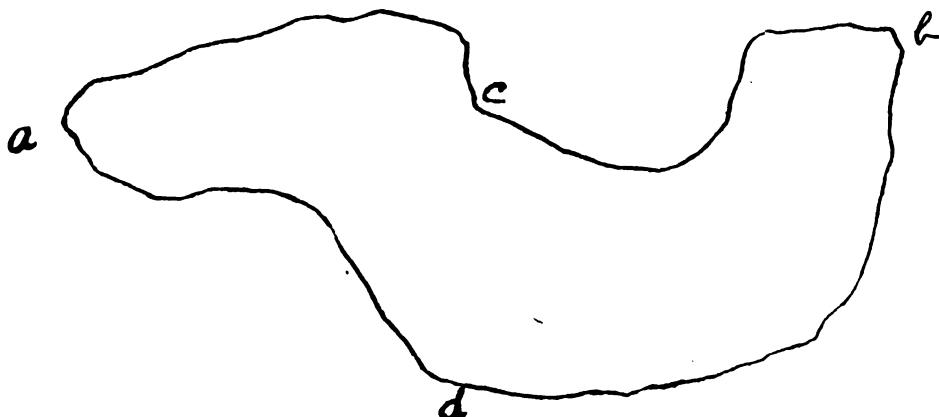
out of the way. The middle turbinated bone was sawed through and removed with the growth through the mouth. The tumor was too large to permit of its extraction through the nostril. The remaining diseased portion of the ethmoid was thoroughly curetted away. A free opening was made into the antrum. The cavity was found to be healthy. At the time of operation the growth had involved apparently only the right lateral mass of the ethmoid bone. After the growth and diseased bone were removed the cavity was packed with gauze and the external portion of the nose replaced and fastened by interrupted sutures. The usual external dressings were applied.

From the time of operation to the present, December 6, 1897, there has been but little to note in the progress of the case. The patient has had one or two attacks of headache, with some elevation of temperature. The discharge from the nose has been very free and is somewhat offensive.

*Cast of the Stomach Vomited
by a Child—Specimen.*

DR. HENRY W. BETTMANN: The specimen before you was vomited by a child a few weeks ago at the Cincinnati Hospital, and was turned over to me by Dr. Gillespie for demonstration to-night. The child, aged six years, was admitted to the hospital at the height of an attack of scarlet fever. She had been on an exclusive milk diet for several days; was quite restless, and had a temperature of 102°. The day after admission she vomited the mass which you see before you, and felt better immediately afterwards, her temperature soon falling to 99°. Her recovery was very rapid.

The peculiarities of this specimen are its size and shape. The cast is $4\frac{7}{16}$ inches long, $1\frac{1}{8}$ in its vertical diameter, and varies from $\frac{3}{8}$ to $\frac{1}{2}$ of an inch in thickness. The shape imitates that of the child's stomach quite accurately, and it is easy to determine the cardiac and pyloric ends, the curvatures being clearly marked. The rugæ and markings of the mucosa are very well shown on the surface of the cast. Regarding



Cast of child's stomach—natural size.

a-b= $4\frac{7}{8}$ inches; c-d= $1\frac{3}{8}$ inches; thickness= $\frac{5}{8}$ down to $\frac{3}{8}$ inch.

its composition there is little doubt but that the mass is a clump of curdled milk. Under the microscope it seems to be made up almost wholly of fat globules; the substance is dissolved by chloroform or ether, with considerable residue.

A few months ago a similar specimen was shown by Dr. Rothenberg before the Society for Medical Research; in that case the patient was an adult woman, and the masses, though large and resembling this specimen closely, did not resemble the stomach in shape. Dr. Gillespie, a few months ago, vomited a similar mass after partaking of schmier-cheese in excess, and an alcoholic patient in the hospital during the summer vomited a similar mass, consisting of curdled milk. Notwithstanding the number of cases here cited, I believe the occurrence is one of considerable rarity. Very little mention of it is found in recent literature.

Resection of Tuberculous Head of Femur.

DR. N. P. DANDRIDGE exhibited a patient, an adult, upon whom it was necessary, some years ago, to resect the head of the femur for an extensive tuberculous disease. The case demonstrated the usefulness of the member after such a procedure. With the addition of a raised shoe his locomotory power was quite good.

DISCUSSION.

DR. MERRILL RICKETTS: I am glad to see that the mania of excision for this condition still prevails with Macewen, Ollier and their followers. I cannot understand why American operators are so loath to remove tubercular bone. It should never be allowed to progress to a degree necessitating amputation, as the speaker has mentioned.

As to joints, an artificial one is more desirable than ankylosis. I have presented cases to this society of removal of the head of femur in which many of the members have predicted a flail joint, but this is not the case in any of them, even with the man forty-five years of age.

I believe that the injection of alcohol, quercus alba and sulphate of zinc will greatly strengthen the tissues about the head of the femur where excision has been performed. Care should be exercised, however, not to use them to the degree of producing ankylosis, if such can be done.

One of the great dangers in allowing tubercular disease to progress in or about the head of the femur is the involvement of the sacro-iliac synchondrosis. This, however, may be the seat of the disease. It might be in certain cases necessary to remove a portion of the head of the femur, even though not diseased, that drainage might be more

perfect in cases where the acetabulum lesion is involved. Such a case has come under my observation.

I cannot believe that it is better to subject a child to several years' process of tubercular disease of the head of the femur, with all its uncertainties and risks, than to remove the diseased bone and end the matter. They are, as a rule, cripples in either event, but the deformity is no greater with the operation than without, and in a majority of the cases it is less.

DR. DANDRIDGE: There are so many that are brought to a satisfactory conclusion without an operation that it is a strong argument against excision. From the statistics of the Boston Children's Hospital, where there were one thousand cases reported, in only fifty cases was excision performed. This conservative measure is not alone confined to this country, for we get similar reports from France and Germany that conservative measures are meeting with great favor.

The operative measure is not dangerous, especially in the early stage, but it leaves the limb shorter, and the shortening becomes greater in time. The consensus of opinion is in favor of an ankylosed joint as against the flail one; with the former they often get a useful member, which is not always the case with the latter.

Foreign Bodies Swallowed.

DR. B. P. GOODE: This specimen is a small plate with a few artificial teeth, that a woman, thirty years old, swallowed; she felt it in the esophagus, and then it entered the stomach. I ordered a diet of potatoes and bread, and in seventy hours was gratified to hear that it had passed away in the stool.

Ingestion of Foreign Bodies.

DR. MAX THORNER: Two weeks ago a little child in Hamilton swallowed a campaign button. When it was brought to me it could not swallow on account of the pain that the act caused. I introduced a bougie, and when it came at the point of lodgment of the button it could go no further. I then tried to get it with a coin-catcher, but failed, as

likewise did the effort with the bristle probang. I then used a whalebone one with an ivory olive point, and with it pushed the offender down into the stomach. There was no further discomfort with swallowing, and four days later the button, in fragments, as you see it here, was passed from the bowels. Originally the button was similar to this one.

Another case was one that the mother said had swallowed a pin, and further stated that it could be seen. Forthwith I proceeded to look into the throat, when she stopped me and said: "Doctor! not there," and then reversed the youngster and we saw a diaper-pin sticking in the anus.

DISCUSSION.

DR. H. M. BROWN: That reminds me of a case that was treated by a celebrated specialist, so-called, of Columbus, for piles, who injected them monthly, which would be followed by intense pain. I was summoned at one of these painful attacks, and upon making an examination my finger came in contact with something hard, which further examination revealed to be a beef-bone. It was removed and the piles consequently were cured, it being the causative factor.

In another case the bone was horizontally across the rectum, and had to be cut in two so that it could be extracted.

DR. J. M. WITHROW: I can readily see why it was passed by the rectum, because it is a Murphy-button, which can be seen by referring to the duplicate, which has a picture of Judge Murphy upon it.

Bronchial Cast; Fibrinous Bronchitis.

DR. G. B. TWITCHELL: This specimen is a cast of a bronchial tube, from a case of chronic fibrinous bronchitis, in a man aged fifty years, whom I saw with Dr. B. P. Goode. He would have attacks of asthma, at which time he would cough up these casts. This condition had associated with it a presystolic bruit; in other respects he was normal.

Appendicitis.

DR. MERRILL RICKETTS: I present five specimens, representing five types of appendicitis: (1) Acute; (2) subacute; (3) chronic; (4) foreign body (blackberry seeds); (5) mechanical. The one of greatest interest is the fifth (mechanical). This was in a lady, thirty years of age, in bed two months; no fever, but little tenderness, and severe periodical pain; the fecal concretion was hard, dry and black, and resembled in shape a funnel. The pain was no doubt the result of peristalsis pushing the mass, resembling the lead of a pencil, down upon the lower end of the appendix.

Puerperal Eclampsia.

DR. MAGNUS A. TATE: Mrs. G. was referred to me by Dr. E. G. Zinke to attend her in confinement. Primipara; general condition good; height five feet four inches, weight 125 pounds; measurements of pelvis normal; urinalysis negative; family history very good.

A few days before her expected time for confinement the urine became heavily loaded with albumen, and she was immediately put upon treatment for the same.

Labor pains began July 26, 1897, about 9 o'clock in the evening, but they were of little value until the following day. Dilatation of the os was tedious, otherwise labor was progressing nicely.

July 27, I was hurriedly summoned at 6:30 P. M. to see patient, but before my arrival, the nurse had chloroformed the patient (following out my directions), for she had had a convulsion. I hastened to deliver, with the assistance of Dr. Heyn (the os being sufficiently dilated for the passage of the head). Applied the long forceps at the superior strait and delivered her of a live child. Just after patient was washed, bandaged and the bed cleaned, she passed into a second convulsion, this about 8 o'clock. At 3 A. M. she had another convulsion, and another at 10 A. M. She remained in a semi-comatose condition for three days. The lochia was normal. Catheterization was practiced for five days. Temperature ranged from 99°-100.4°,

and the pulse 112-140 during the first three days after delivery.

July 30. Three days after delivery patient had another convulsion (this making five convulsive seizures), which left her in a very enfeebled and precarious condition. Temperature two hours after convulsion, 101.4°, pulse 130.

August 2. A slow but steady rise in the temperature, until evening at 10 P. M. it reached 103°.

August 3. A slight offensive discharge, and the temperature ranged from 101°-103°. I decided to wash out the uterus (using hot sterilized water), which was done that evening at 8 P. M. At 9 P. M. the patient felt as well as could be expected, and did not complain of any pain. Temperature 101° and pulse 100. At 10:30 they called up by telephone, but not being at home they summoned Dr. Zinke, who responded. When the doctor arrived the patient was pulseless, the temperature 106°. It is needless to say that a very unfavorable prognosis was given and her untimely end seemed but a foregone conclusion—in fact, only a question of a few hours. I reached the house about 11:30 P. M. After the doctor left, and before my arrival, patient had a discharge from the vagina of about a pint of offensive matter, and the nurse showed me several of the pads, which were thoroughly saturated with pus. At this time the pulse was very feeble and irregular (about 160 to the minute as near as we could count); the temperature had fallen to 104.4°. I stayed at the house all night and nearly the whole of next day, and the treatment followed out was hypodermics of whisky, strychnia and nitroglycerine, her body wrapped in warm blankets, hot-water bottles to the feet and sides of body and ice-bags to the head. It seemed a useless procedure, but with that determination which often comes to the desperate, I kept up the treatment, and, much to my astonishment, her condition seemed a little improved by 6 A. M.

During the following eight days there was a constant struggle for life, the temperature ranging from 100°-104°, pulse 110-140 per minute. Half of the

time she was unconscious. The urine was scant and contained albumen and pus. Her stools very large, frequent and of a light greenish color, mingled with shreds of tissue, and were so offensive that the whole house seemed saturated with this sickening odor, in spite of our constant use of disinfectants and fresh air. Two days following her collapsed state vomiting set in, which persisted, and in her deplorable and feeble condition this indeed seemed an ill omen. Dr. E. G. Zinke again saw the case with me, and we fed her entirely by rectum for five days, and then I gradually allowed a little nourishment by the mouth. Rigors, followed by rapid elevations of temperature, and this by profuse sweating, were common at this period of her illness; headache during the conscious moments intense, and cramps in the pit of stomach were continuous.

On the sixteenth day after delivery my patient began to improve, and, although very slow, it was a daily strengthening of the system. The bettering of her condition continued until recovery was now a matter of time, and on the 5th of September I made my last visit.

This case brings up many points of interest, viz., albumen in the urine, followed by convulsive seizures; instrumental delivery; collapsed condition eight days after delivery; a discharge of pus by vagina, then bettering of her condition, followed by persistent vomiting. The washing out of the uterus in her case was a simple procedure; the patient complained very little if any, and, besides the shreddy mass mixed with some offensive lochial discharge, there was nothing of importance came away with the water. The uterus was well contracted for the period after delivery. The question of paramount importance now was, where did the pus come from? and it was not until my final examination that I was able to shed some light as to its locality. To the right of the uterus I found a small canal, which was blocked off from the peritoneal cavity by a recent inflammatory exudation, and my diagnosis now is that she had either a distended pus-tube or a

pelvic abscess, and it had ruptured into the vagina following my manipulations in washing out the uterine cavity. The cervix during delivery was torn on the right side, but the perineum was intact. The child is still living and a healthy infant.

DISCUSSION.

DR. A. L. KNIGHT: Through the kindness of my colleagues I have seen three cases of eclampsia, one fatal, and in the two that were not the attacks were epileptiform in character; they previously had epilepsy. The fatal case was delivered of a stinking fetus. The pulse was rapid and the convulsions, though clonic, were mild in character and were the result of profound toxemia. The issue was soon fatal. There was no resemblance to the epileptiform in this case. In one of the others the urine contained albumen.

Acute Mastoid Disease—Result of Erysipelas.

DR. J. E. BOYLAN: The case I have to report is only another contribution to a long list that illustrates the dangerous destruction that may be done in a comparatively short time by an acute mastoid inflammation; it has, however, other features of interest; the chief of these, and the one which leads me to report it, is that it was developed by erysipelas. The patient is not here for a potent reason.

The facts are briefly as follows: The lady in question was seized with facial erysipelas, which began about the nose and soon spread to the sides of the face, the scalp and the region of the ears. The attack was a severe one, involving the auditory canal, and during its progress there developed on the left side an otorrhea, which continued after the erysipelatous manifestations had faded away. Five weeks after its appearance the family physician noticed the first symptoms of mastoid inflammation, and ten days later the patient was seen in consultation. At this time she was in a very critical condition; the soft tissues over the mastoid were enormously swollen and discolored, the pinna standing straight out; pressure in the mastoid

region elicited acute, deep-seated pain; her temperature was 103° , and intense, persistent headache had robbed her of sleep for several nights.

Immediate operation was urged and resorted to on the following morning. At the first incision a thin stream of pus welled from the bottom of the wound, and upon baring the mastoid a perforation of the cortex as large as a dime was exposed, near the apex of the process, from which pus oozed and granulations protruded, the bone surrounding the opening being discolored or denuded of periosteum for a considerable area. Upon removing the unhealthy bone so that a finger could be easily introduced, the septa of the cells were found to be broken down in all directions, so that the whole outer portion of the mastoid had been converted into one large cavity, from which, after it had been cleared out, a fistulous track could be traced with a probe upward and forwards towards the antrum. Of the operation I will only say that the fistulous tract was widened and followed up with the gouge and its communication with the middle ear clearly demonstrated by syringing water through the meatus. By the time the dressing was removed—on the third day—the patient was relieved of all threatening symptoms, and for some time made uneventful progress towards recovery, the discharge from the meatus ceasing. The case, however, proved exceptionally persistent, and notwithstanding a painstaking after-treatment, including most careful packing, the suppression of granulations, and finally even the introduction of a silver drainage-tube, an intermitting discharge continued from the wound for many weeks, and it was with much difficulty that the track was kept open. Things, however, progressed hopefully till one morning, after missing the patient for two days, I was surprised to hear that the dressing had come out during the night and that the wound had "healed."

Although the aperture was at once cleared, the discharge increased if anything, and at the end of another month, a second operation was resorted to. Present, Drs. Orr and Thorner. On

this occasion the old track was disregarded, and what is known as the typical mastoid operation was made by sinking a conical canal from the overlying surface directly into the antrum, the new opening thus made lying about half an inch above the old one. After thoroughly exposing the antrum, the bone tissue separating the two openings was chiseled away, thus laying bare the whole course of the old tract and practically completing the removal of the outer table of the mastoid process. As no signs of caries were noticeable within the antrum, and otorrhea from the meatus had been but slight at any time since the first operation, the radical procedure of removing the posterior wall of the meatus back to the antrum, and thus converting the antrum, tympanum and meatus into a common cavity, was still desisted from, and the drum and ossicles were therefore left intact, to which is, no doubt, largely due that the patient's hearing in the left ear is still very good. She hears the acrometer at six yards. Repair after the second operation, though somewhat tedious, progressed steadily to complete recovery.

A tendency to spread is, as we know, the characteristic feature of erysipelas, which has given the affection its name, and it is not at all uncommon for it to involve the external meatus. Erysipelas is not, as we are usually taught to look upon it, a superficial, but often a phlegmonous inflammation. Microscopic examination of the diseased skin in a number of cases, notably by Volkman, has shown that very pronounced pathological changes occur, although, owing to the acuteness of the affection, they usually disappear rapidly, and that the greatest of these changes are located in the subcutaneous cellular tissue.

This statement is further confirmed by Baumgartner's bacteriological observations, that the erysipelas coccus, which, incidentally stated, he believes to be identical with the streptococcus pyogenes, is less active in the superficial firm layers of the skin, causing sero-cellular or fibrinous exudation, while in the loose subcutaneous tissue it attains its greatest virulence, and causing sup-

uration. When we, therefore, consider that the drum forms a comparatively frail barrier to inflammation; that it is at times perforated from without as the result of inflammations occurring in its structure or in the external meatus; and, further, that the extension of deep-seated inflammation from the osseous external meatus to the periosteum of the mastoid is greatly favored by the close relation of the soft parts to the periosteum in this region, one would expect to find acute mastoid inflammation at least an occasional sequela of erysipelas. In the literature, however, its occurrence seems to be rarely noted, and I have thought the case, therefore, of sufficient interest to record.

DISCUSSION.

DR. MAX THORNER: This is an interesting case in that the mastoiditis was produced by the erysipelas. Whenever we have an otitis media that does not respond after a reasonable time to cleansing measures, it then becomes a case for operative measures, because the antrum is lower than the floor of the middle ear, so that if pus continues to discharge after all your efforts to correct the condition it is then indicative that it comes from the antrum instead; so if, after a reasonable time, pus continues to discharge, and the pain in the head does not subside, then operative measures should be considered.

Decidual Retention Complicating Pregnancy.

DR. T. A. REAMY: About two weeks ago I was called to the country in consultation, in a case that eleven days previously had been delivered of a child. Three days after the delivery she had a chill and a temperature ranging from 101° to 103° daily after this, but there was no discharge nor odor that would suggest that the trouble was in the uterine cavity; besides, the doctor informed me that a perfect placenta had come away; that though he was not present at the delivery—a friend acting for him—yet he had arrived in time to see and examine the placenta. Upon examination I found the uterus much larger than it should be at that time,

and the os firmly closed. I then introduced a speculum and with steel dilator dilated the canal, which was done without usual resistance, when a sero-purulent fluid with offensive odor escaped. I then carried my placental forceps into cavity and removed quite a quantity of decomposing secundines, which but illustrates that there is not always discharge associated with retained material in the uterine cavity. I prefer the placental forceps to the curette in recent obstetric cases, because I consider it safer, and the work can be done more expeditiously. In but few cases of this character is the retained material, even when it is placental, adherent, and in such cases the curette is often a source of positive damage.

Uterine Fibroid.

DR. GILES S. MITCHELL: This specimen, a fibroid uterus with tubes and ovaries attached, was removed October 25, 1897, at St. Mary's Hospital. Was assisted in operation by Drs. Welling and Feid.

Patient, Miss G., aged forty-eight, white, and of good social position, was referred to me by Dr. C. M. Gravis, of Martinsville, Ind. Family history good, except some member of father's family died of tuberculosis. She menstruated first at thirteen, the function continuing normal until she reached her twenty-fifth year. From that time on she suffered with dysmenorrhea, and the flow became more and more profuse, until it amounted to a menorrhagia. Five years ago she consulted an eminent gynecologist of this city, who made a diagnosis of uterine fibroma, but advised against an operation. Two years ago menstruation ceased and did not return until six months ago. For two months prior to operation the flow was almost continuous, and so profuse at times as to amount to a uterine hemorrhage. Pain was also present, and occasionally very severe.

The operation, an abdominal hysterectomy after the method of Baer, was quickly and easily accomplished. Silk was used in ligating vessels, but a continuous cat-gut ligature was employed in uniting the anterior and posterior

peritoneal flaps, and silkworm-gut for closing abdominal walls. Highest temperature and pulse since operation 100° and 90 respectively; since three days patient's temperature has been normal. I regard her recovery as assured.

P. S.—Patient left the hospital, cured, December 1, 1897.

The Causes of Puerperal Eclampsia.

The nephritis which coexists with eclampsia is mainly secondary and analogous to nephritis of scarlatina. The liver deals more rapidly with the nitrogenous products of metabolism than with the non-nitrogenous moiety. Some authors suggest that in pregnancy the increased work thrown on to the liver may result in hepatic inadequacy, and that there may be a "liver of pregnancy" just as there is a kidney of pregnancy. The products of metabolism in both fetus and mother are carried to the maternal liver, where they normally undergo katabolic changes to urea and bile salts; but in cases of hepatic inadequacy these products accumulate and eclampsia results. Strumpf found acetone in the urine of all eclamptic patients, whose breath smell of it. The relation of acetone to metabolism is so important that the urine of pregnant women should be systematically examined for it.—*American Journal of Obstetrics.*

Dangers of the Bust-Developer.

According to the report of two cases of fibro-cystic degeneration of the mammary gland, by Dr. George F. Hulbert, before the Southern Surgical and Gynecological Society, the suction apparatus, known as a bust-developer, was the cause of the trouble. It fits snugly over the breast, and the intervening air is exhausted by a well-contrived air pump, thus causing intense hyperemia of the enclosed gland and its cutaneous covering. It is presumed that this is apt to cause pathologic changes which, aside from the danger of morbid growths, justifies the fear that it may also interfere with future lactation. Observation upon these points is very desirable, and should be reported.—*Med. Council.*

Translations.

NOTES FROM THE HISTORY OF MEDICINE.

FROM THE WORKS OF DE BORDEU.

TRANSLATED BY T. C. MINOR, M.D.,
CINCINNATI.

SECTION I.

Empirical Physicians, or Those Who Base their Practice Only on Experience — Empirical Medicine has Existed from all Time; It is Like Natural Religion; It was at First Only an Instinct in Man.

There is a popular medicine born, so to speak, with men; they have carried it everywhere, and everywhere cultivated it with care. Necessity dictated this medicine to mankind, as it learned them how to prepare their foods and drinks; so they have thought how to care for and cure themselves, as well as to shelter and feed themselves, so as to be guaranteed from all possible accidents. Such is empirical medicine, founded on daily experiences. Fathers taught it to their children; it passed down from generation to generation, and our generation will prepare it for others to come.

Mother or father of all other medicines, if we may speak thus, or of all other systems under which the healing art has been cultivated, empirical medicine has suffered many revolutions; sects that owed their origin to it disdained it; it has passed for a tissue of fables or errors in certain countries; in others it has been relegated to men without standing. The name empiric has become a sort of injury or odious imputation.

Yet this natural medicine has had its days of triumph, its partisans and great men; it has prevailed for long periods of time, reigning alone in entire nations; there are still vast numbers of people who only know its precepts; it has rendered grand and important services to humanity; it has not ceased, and will doubtless never cease, to have its zealous defenders, even in the midst

of sects of medicine that seem most opposed to it. We owe to empiricism the inoculation of small-pox; it was in the very bosom of empiricism that inoculation had its origin. It is to empiricism that we owe this discovery, as well as the most—let us add the great majority—of all medicinal remedies.

Like, as I have dared to remark, natural religion, empiricism had for its first foundation a sort of instinct or sentiment born within us; we see traces of the same thing in animals, and find evidences of it among the most savage tribes, but social morals have almost destroyed it in large cities and in fashionable society; they have choked in the sick the very language of instinct; people have given themselves up in many instances to the care of physicians who are unable even to understand the language of instinct, so much are these doctors preoccupied with other systems of medical knowledge.

These two causes, in proportion as they have acquired more force, or in proportion as mankind has multiplied in cities, where they are accustomed to live as one society, where physicians have trained the mind to sublime thoughts of the sciences, have, it is true, put empiricism to rout. It has been charged little by little with a thousand practices it has produced, like the abuse or bad usage of natural religion, a sort of idolatry, an immense collection of remedial recipes, no less foolish and extravagant than the follies of paganism.

Yet both still reign alone, paganism or natural religion destroyed of its first purity, the same as medical empiricism corrupted by the visions of credulous so-called learned medical minds. Both are monsters, the corrupt children of wise Nature, still holding the human species in tyranny; if on one hand revelation does not clear up matters, if it does not instruct, subjugate and revivify man as regards medicine and the sciences, it is not purified, especially if it has not been aided by the support of the laws.

But has the reform of the sciences entirely vanquished empiricism? Has it destroyed it? Has it been able to

accomplish all this? No! At first it was not able, or, better still, it was not in the right to attempt it; for this right, as religion did not dictate, since it left to mankind its disputations and exercise on purely human things, such as medicine, legislation restricted no one to any sensible degree. All the world was permitted to examine the laws of nature, its very foundations, the utility and disadvantages of empiricism, and its comparison with other sects in medicine.

Empiricism or experimental medicine was at its commencement, then, only an instinct of the sick and of those who sought to help them; from thence arose an active and industrious curiosity to try all varieties of remedies. Fortune came to its support; the collection of observations put, so to say, in comparison the results of the different treatments; a comparison of sick to treat with those previously cared for and cured, or on whom the remedy had no effect, aided to form a sort of body for the medical doctrine.

There were no scholars only destined to teach the doctrine, no books to preserve its teachings, no professors to laud its merits; instinct, common sense, the natural talent of some people, the experience they had acquired, the desire to be useful to one's neighbors, the recital of facts deprived of all scientific discussion—such were the books, scholars and the professors of the empirics.

To say that these empirics did not reason, and that they could not reason because of the profound ignorance in which they lived regarding true sciences, is to impose evidently, let us say to play on the credulity of the world; this is merely the desire to follow in the excesses of dialecticians and other learned sects, who pretended that the most common knowledge was subjected to their laws. *The empirics have always reasoned*, comparing in their own manner the nature and circumstances of diseases, choosing the species, graduating the dose of the remedy, seizing the proper time for the application of medicines. All this is evident, and there never was a perfect empiric, if we wish to take this word in its vigor.

We find everywhere this reasonable

empiricism that has just been defined; it was omnipresent, it was the very cradle of all other sects of medicine; all these sects were at first only the collections of the histories or observations made by empirics, and upon which different theories of medicine were afterwards built. We find this in the works of the most celebrated dogmatics, in those even who believe themselves to be opposed to empiricism; it is found, finally, too, in the treatment of all the various diseases.

SECTION II.

Empiricism Natural in Egypt, among the Chaldeans and in Greece—Hippocrates an Empiric—Hippocrates Compared to Homer—Medicine among the Romans.

What was medicine in the unhealthy clime of Egypt, before it was confided to the hands of the priests? These priests themselves were only empirics, strengthened by the aid of the social condition; they had, without doubt, their emissaries, their apprentice priests, scattered throughout the country, where empiricism prospered and increased by the side of the senna, cassia and other remedies, where these apprentices took their lectures and their degrees before arriving at the honor of medical priest.

The Chaldeans, the Magi, so occupied with the movements of the stars as to predict future events—were they entirely ignorant of medicine? Did they not cultivate it like poesy? These bright minds, keen to know, never neglected the more useful things, the knowledge of diseases, of plants and their virtues. They were sometimes sick, too, these great personages, although sober, strong and healthy. Their children, their wives, their old people and their slaves furnished them thousands of experiments to make. All was new to them.

The Greeks, proud of having produced Hippocrates, must not forget that this physician was born in the eightieth Olympiad, about five hundred years before the Christian era, and that many ages before Hippocrates there had been doctors even in his family. If Æscula-

pius and the centaur Chiron cut a figure in the corner of the earth occupied by the ancient Greeks, other nations likewise had their physicians and their remedies. So that even were Hippocrates and his ancestors not put in the class of empirics, that class of doctors would not lose anything, since they existed long before all these known Greeks.

It would be easy to establish the proofs of this fact; they have not escaped medical historians. We all know the Greeks were very fecund in literary men of all kinds, and consequently knew diseases and doctors. We know that three hundred authors wrote a description of one battle at the same time, and we can no longer doubt that more than three hundred physicians may have treated the same disease.

Hippocrates himself clung tightly to empiricism. We see it in him, we find it in his works by the side of his grandest views; there are sublime ideas, the best made and best rendered of all observations, pictures as speaking as those of Greuze, regarding the position, the movements, the physiognomy of patients, etc. We find it, finally, in those bold and luminous treatises, children of a soul that took flight and carried medicine to a high point of glory and perfection. We find a thousand proofs of this candor, justice and wisdom, that are perhaps the marks that best characterize a true physician.

But we also find, especially in his practice, evident indications of the leaning this great man had for empiricism. He only employed remedies that experience had found useful long before his time; he never imagined bleeding nor purgation, that only originated in a being less well constituted than Hippocrates; he mentions more than a thousand drugs that had all been tried. In a word, Hippocrates seems to have united in himself the resources and industry of empiricism with the brightness and views of physics and the other sciences. He has left us, so to speak, an encyclopedia of medicine, in which every sect may find precepts and examples.

So empirical practitioners, when

they organize in a body and sustain their opinions against the dogmatists, never fail to range on their side the writings and methods of Hippocrates. His theory and physic have grown ancient, and have not preserved such a grand reputation as formerly, except the observations and details regarding some remedies, that he copied perhaps, or at least imitates in part, that which he had learned from his medical ancestors.

It is no less possible to refuse a place among the empirics to all these ancestors of Hippocrates, even as far back as to Æsculapius, although he may not have come up with the favor and the brilliancy of a divinity, with which all nations have adorned him. A proof that all these very ancient doctors were only empirics is that they existed a long time before Pythagoras and Aristotle, who have always been the principal models of the dogmatics, those who put it into fashion, making on the subject of medicine long and beautiful discourses, arguments, subtleties of dialectics, natural history, with the plan of going back to first causes, commencing the study of the art by general causes, in order to afterwards descend by degrees to the details of practice.

We do not know whether, among all the eulogies written on Hippocrates, he has ever been compared to Homer; it seems to us that a parallel exists between these two grand men. The more illustrious of the poets, those whose style is the purest, the ideas most beautiful, the imagery most varied, might well march side by side with the most famous of all physicians. The respect that some of the ancients had for Homer was so marked that they imagined they had invincibly proved a fact when they could support their opinions on some passage from the poet. Physicians have had no less a veneration for Hippocrates, nor any less confidence in his decisions.

Homer endured critics; those who best understand his language are obliged to agree that there are many things in his work that will not bear translation. They pretend that the prestige of the Greek and harmony must pass as a mass

of many old stories, tiresome dissertations, a perpetual uproar among the gods, who act like so many puppets; there are many minute facts found at the side of the most beautiful lines.

Hippocrates is not much longer heard of nor tasted, even when translated into the vulgar modern tongues. It is necessary to study him particularly; his philosophy is old, his theory rejected; that which is most singular is that his style, his explanations, his views and his remedies are still in faithful connection with the language of all peoples; they believe they hear a peasant giving a recital of his ailments and the history of remedies.

In a word, we may say of Homer and Hippocrates, with Dion Chrysostom, that they made a great reputation and collected ideas, images, facts, even expressions that passed current among the vulgar masses, which is to say, for that which did not concern Hippocrates, that he has been in great part only the history of empirics, who had taken care to make the first experiments.

Physicians owe to the careful and malignant criticism of Pliny the knowledge of the epoch at which the medical corps established itself at Rome. Montaigne, a copyist of Pliny on this subject, has singularly served to spread this history of Pliny. Rome made a conquest of half the world without recognizing the doctors among its citizens. This was the triumph of empiricism, and only serves to embarrass dogmatic physicians. What difference does it make to the empirics that Rome for a period of six hundred years had no medical colleges nor medical professors, no books, no anatomists? Were physicians missing, or were they only found in times of pestilence? Were there no drugs, nor persons who knew how to apply them?

Cato practiced medicine in his home, and likewise in the dwellings of his friends; masters treated their slaves; the latter communicated their observations; midwives had the care and conservation of the health of women and children. Cabbage, they say, was a very favorite remedy in those old Roman days, that are represented as being such

happy ones. Cato knew the use and virtues of cabbage and many other plants, apparently. He was ignorant of the fact that one could draw the salts and other principles of cabbage by analyses; yet he was no less a learned man in the application of the plant. It is enough for the empirics to place Cato in the ranks of their partisans, as it is likewise certain they may have had other like heads in their sect.

They use these forgotten names to the shame of humanity—these prudent and wise men, who taught mankind how to make bread, how to cook meat and vegetables, how to purge with aloes and colocynth, how to arrange the hours for daily meals; besides, they have many other names to support them. Osiris and many other Egyptian kings applied remedies with a knowledge of their effects; so did various Chinese emperors. There were Mithridates and Alexander, who were no less the protectors of empirical medicine. Shall we go back to Achilles and Ulysses,

who dressed wounds? Hercules, who excelled in the healing art, according to Plutarch? So, too, Maurice of Saxony never forgot to recommend to his soldiers the use of vinegar, known to the Romans and all the peoples of meridional countries. Perhaps one may not be willing to put all these great names in the class of physicians not purely empirical? It is necessary, in order to take the other side, to have the same taste—let us say the same mania—as a doctor who can never speak of great physicians of antiquity only when calling on Doctors Æsculapius, Hippocrates and Averrhoes; he, too, should not fail to mention Doctors Ulysses and Hercules.

[TO BE CONTINUED.]

DR. F. W. MANN has succeeded Dr. Stockwell as editor of the *Medical Age*.

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**CONSIDERATIONS ON THE
DIAGNOSIS AND OPERA-
TIVE TREATMENT OF GALL-
STONES.¹**

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The domain of surgery contains no field in which richer harvests have been gleaned, or more quickly, than in that of the biliary passages. Although cholecystotomy was done in 1868 by Boggs, it was not made a formal operation until ten years later by Marion Sims. In less than a score of years, therefore, it may be said that the surgery of the gall-bladder and ducts has been developed until it would seem that little can be added to what is already known, or that greater success can be obtained in the future than the past has yielded.

Nevertheless, there are many points in the etiology and diagnosis of gall-stones, their concomitants and sequelæ, that are mooted, and the elucidation of which may eventually make more successful the results to be obtained from operation. To some of these points I would beg to direct your attention, and, as far as possible, to illustrate them with appropriate case reports and specimens.

Concerning the etiology of gall-stones comparatively little is known. The changes in the urine which lead to crystallization within the kidney or the secondary calculus formation in the bladder, which can be recognized by

urinalysis, present no analogies in the origin of gall-stones. This seems to depend on crystallization of an excess of cholesterin, possibly due to stagnation within the gall-bladder and the absorption of water, probably the result of a transient infection of the mucosa and desquamation of its epithelium. Naunyn has shown that the cells lining the gall-bladder exude a substance which, by the addition of acetic acid, is formed into cholesterin. Certain it is that gall-stones present but few varieties, and that the vast majority are formed either of pure cholesterin or of bile pigments. Either of these may secondarily be encrusted with lime salts when retained for any length of time within a suppurating nidus. In size, in color and in shape they vary much, even more in numbers; still, the gall-stones found in an individual case, as a rule, resemble each other as much as do peas in a pod. Not the least interesting cases are those in which nothing is found within the gall-bladder or its ducts save a few calculi not larger than millet-seeds or a little biliary sand, black in color, hard as emery and so insignificant in quantity as often to be isolated only with great difficulty. It is needless to say that an examination of the urine will, as a rule, help us to recognize the chemical constituents of a stone in the bladder or in the kidney. Unfortunately, we have no like index to the recognition of the nature of a biliary calculus. When we regard a gall-bladder containing anywhere from two or three to as many thousand gall-stones, we involuntarily ask ourselves, when did these gall-stones develop, what in point of age is their relation to each other, and is it possible that they were all formed at about the same time and owing to a common cause?

¹ Read by request before the Montgomery Medical Society, at Dayton, O., January 7, 1898.

In the prognosis of gall-stones as to recurrence after operation a solution of this question would evidently be of first importance. In the first place, recurrence of symptoms after gall-stone operations is, according to all writers, an uncommon occurrence. Where a biliary fistula has remained, or closed temporarily, and a gall-stone is removed by a second operation or is spontaneously discharged through the fistula, it is reasonable to suppose that it was overlooked at the first operation. In my own experience, since my first operation in 1879, I have had no instance in which a second operation was necessary, nor in which there was such recurrence of symptoms as to lead to the suspicion of the reformation of calculi. Whereas, the proof sufficient to bring conviction is difficult to obtain, I have satisfied myself that most of the gall-stones, if not all, contained in a given case are formed at about the same time from causes that are without our ken. In exceptional cases there is internal evidence from the appearance of calculi that they are chronologically far removed from each other, although contained within the same bladder. In looking over my many specimens of gall-stones which have been removed by operation, you will find only two in which there is internal evidence of a difference in the respective ages of the calculi removed.

In the point of diagnosis it is ordinarily not difficult to come to the conclusion that gall-stones are present, although cholelithiasis, as has been shown time and again by autopsies, is one of the most frequently overlooked of all disorders. Certainly the diagnosis of gall-stones is not made in any community in every tenth or even every thirtieth individual. Yet in from 3 to 10 per cent. of adults (according to Paulsen and Naunyn, varying with different countries, gall-stones are found. Quite recently I had occasion to remove gall-stones from a deaf-mute, forty-five years of age, who had previously had her ovaries removed for supposed ovarian disease, and had later been treated, a short time before the diagnosis of gall-stones was made, for

stricture of the right ureter and consequent renal distension. The attack of colic itself is apt to be mistaken for biliousness, dyspepsia, cardialgia, kidney colic, appendicitis, intermittent fever, intestinal obstruction, pleurodynia, and most frequently of all for gastric catarrh. The variety of affections for which gall-stone may be mistaken gives evidence of the lamentable fact that there is no reliable sign of the presence of gall-stone or of disease within the biliary passages. Notwithstanding this defect, it is my belief that where an operation is made for the relief of gall-stones a failure to find one is far less likely to meet the operator than in similar exploratory operations on the kidney. In the cases that have come under my care I have but once failed to find a gall-stone or disease of the gall-bladder. This was a case referred to me by Dr. Brown, of Germantown, of a man of thirty, who had passed eight or ten characteristically faceted stones. On the day fixed for the operation at the Good Samaritan Hospital, he was seized with a colic, which necessitated its postponement. The stone passed and was found in the stool. Three days after the attack was over a cholecystotomy done before the class revealed an absolutely empty gall-bladder and gall-ducts. The last stone had passed.

While, therefore, in a general way the diagnosis of gall-stones can be made by paroxysmal pains starting in the right hypochondriac or in the epigastric region and radiating towards the back, or the tip of the shoulder, by the nausea and vomiting and the sudden onset and close of the attack, by the development of a mild jaundice, the presence of localized tenderness and the physical signs of a distended gall-bladder, the diagnosis as to the localization of the stones is far more difficult. It is here that the operator often meets with surprises, in that cases which from the clinical history would lead him to expect stones in profusion in the gall-bladder alone, he will find them only in the cystic duct, or where from the number of attacks he would look for a multitude of stones, he will find but few in

number. While it is impossible, with our present knowledge, from the clinical symptoms to locate a stone with certainty before operation, there are certain features which permit one to come very near the truth.

Mr. Jordon Lloyd has very properly grouped gall-stone cases into those in which the gall-bladder walls are yielding and allow of its distension, and those in which the walls are contracted, thickened and indistensible. In either of these groups the stone may lie in the gall-bladder, in the cystic duct or in the common duct. When stones occupy a distended or distensible gall-bladder alone there may be no symptoms except the attack of colic, with a mild jaundice a day or two following it. When the stone occupies the cystic duct, jaundice is not usually present; there are attacks of colic and considerable distension of the gall-bladder. Frerichs had already shown that in these cases the stone within the cystic duct may act as a ball valve, permitting the entrance of bile into the gall-bladder and preventing its egress. It is in these cases in which the gall-bladder is often very largely distended that we find what Hippocrates already called white bile, which is nothing more than the accumulated secretion of the glands of the vesical mucosa. Jaundice is not a common evidence of stone in the cystic duct, although in one of my cases a large stone embedded within it near its confluence with the hepatic duct had so occluded the latter as to produce a very deep jaundice. When there is a stone in the common duct with a distensible gall-bladder, there are usually present more or less deep jaundice, pyrexia, a distended gall-bladder, and moderate enlargement of the liver from distension of the finer biliary ways. Stones limited to a shrunken and indistensible gall-bladder are not easily located with precision. They may be suspected where there are frequently recurring paroxysms of pain and where there is tenderness in the region of the gall-bladder, without the presence of a tumor. A stone within the common duct, with dilatation of it and the cystic duct, and a shrunken state of the gall-bladder, presents evi-

dences of its location with greater certainty probably than any hitherto considered. It is in this class of cases particularly that the hepatic intermittent fever of Charcot and of Osler manifests itself. In one of my cases, recently operated upon, these intermittent attacks had lasted for nearly ten years. The attack invariably began with an intense paroxysm of pain, which was associated with a rigor, followed by temperatures of 103° – 104° , and profuse perspiration. Whereas, the patient always presented during the entire period of his gall-stone history a sallow appearance, the jaundice became very deep after each attack. Nowhere in the biliary passages is the ball-valve action of a gall-stone so perfectly manifested in the clinical history as in those contained within the common duct. Paroxysmal pains in jaundice, varying in degree, are almost invariable evidences of gall-stones located within the common duct. When gall-stones are contained within the gall-bladder as well as within the common duct, no symptoms exist from which the presence of stones within the gall-bladder could be recognized. From a clinical as well as from the standpoint of operation, the stones within the gall-bladder then play a very subordinate rôle. This applies equally to the rather rare cases in which stones are found within the hepatic as well as the common duct. The condition is uncommon. It has been my privilege to see but two cases, one in an operation, the other in the autopsy of a case seen with Dr. Withrow. The patient, a male, nearly seventy years of age, refused an operation, which was not particularly urged, since malignant disease was strongly suspected. Three large gall-stones were found, one in the gall-bladder, one in the hepatic and one in the common duct.

Cholecystitis from other causes than stone cannot be distinguished from that due to stone. In three cases I have met this distension of the gall-bladder from obstruction of the cystic duct without the presence of a stone. In each of these cases a tumor was manifest. In only one of the cases had the infection

led to pus formation; in two of the cases there was found a thick, ropy, black bile and biliary sand or small calculi. It is interesting to note that in three of my cases of choledochus stone, with the fever curve indicating the presence of pus, pus was not found. The cause of the febrile elevations in these cases of cholecystitis and of choledochus stone, where there is no supuration, is utterly unknown. It is ascribed to some ptomaine poisoning, of course, but it is interesting in view of the fact that cholemia from obstruction, as in malignant disease, is, as a rule, associated with a reduction in contra-distinction to an elevation of temperature.

Among the diagnostic features of lesions of the biliary ways there is one that merits special attention. I refer to icterus. Until Lawson Tait pointed out that it was rather an evidence of malignant disease than of lithiasis, persistent jaundice was held to be an almost unfailing sign of the presence of gall-stones. Latterly its import has been overrated in the diagnosis of cancer. *Per se*, icterus is a most unreliable symptom, both as to the nature and location of an obstruction. In two cases of men over seventy, one of my own and one of Dr. Evans, in whom persistent icterus, with pain, vomiting and progressive emaciation might have pointed to the existence of pancreatic carcinoma, the operation revealed large stones in the gall-bladder alone. In regard to the importance of this symptom in localization, on theoretical grounds its persistence could only mean obstruction by stone in the common or hepatic ducts. Yet in three cases of empyema of the gall-bladder from stone and in one without stone which I have operated on, jaundice was both pronounced and persistent without the presence of a stone in the common duct. In all of these cases the icterus was of an inflammatory nature, and depended on an extension of the swelling from the mucosa of the bladder to that of the common duct. Riedel has rightly called this condition inflammatory concomitant or allied jaundice. These cases, and those in which stones are

not found, furthermore establish a fact often disregarded. It is that the severest biliary colic does not necessarily depend on the transit of a stone, but on the expulsive efforts of the gall-bladder to force its secretion through a duct largely reduced in its lumen by infiltration of its walls.

Peri-vesical adhesions doubtless may likewise produce biliary colic without the passage of a stone. The adhesions which a shrunken gall-bladder often forms to the omentum, to the colic flexure or pylorus, or all of them, must with the distension of one or other viscus more or less obstruct the biliary outflow and give rise to colic. In a number of cases the stones were so nicely packed at the time of operation in a shrunken and adherent gall-bladder that the relief afforded by the operation did not appear to me the result so much of their removal as of a severance of the adhesions of the gall-bladder to contiguous organs.

Empyema of the gall-bladder is ordinarily recognized with ease, yet are there cases where it has been mistaken for peri-appendiceal abscess or for a floating kidney. In one case I removed from an incision made for appendicitis four gall-stones. The clinical history was not that of an acute appendicitis. The patient, a very fleshy woman, forty years of age, had suffered repeatedly from gall-stone colic. For seven weeks before the operation was performed she had been confined to bed with the general evidences of intra-abdominal suppuration. At the time of the operation the abscess was limited anteriorly by the omentum, which had become adherent to the colon and cecum. It could be traced upwards towards the region of the gall-bladder, although its upper limit was not accessible. Had it not been for the presence of the gall-stones a differential diagnosis could not have been made even at the time of the operation, since the density of adhesions precluded the search for the appendix.

In a case operated on by me for Dr. Little, of Cambridge City, there was a clear history of appendicitis. The operation revealed the presence of four

faceted stones that looked at the first glance like biliary calculi, but upon section showed that they were but calcareous incrustations of small fecal masses, enteroliths. The possibility of mistaking a gall-bladder for a distended kidney exists, since in not a few cases an incision in the loin for supposed renal disease revealed the presence of gall-stones. Such a case was reported to the Academy of Medicine of Cincinnati a few years ago by Dr. Jones. The error in diagnosis is the more readily made since Riedel has shown that the prolonged existence of gall-stones will often, by traction of a distended gall-bladder, more or less separate from the under surface of the liver a tongue-shaped lobe, which, being in front of the gall-bladder, gives semblance to the form of a renal tumor.

It does not seem probable that any peri-hepatic suppuration could be mistaken for empyema of the gall-bladder. Nevertheless, a case recently came under my observation in which a differential diagnosis could not be made until the abdomen was opened. The case was that of a lad of fifteen, who repeatedly had had attacks of pain in the hepatic region. According to the clinical history, these pains were never associated with elevations of temperature. Three weeks before the patient was subjected to operation he had sustained a slight blow upon the abdomen. For a week he did not complain. He was then seized with violent pain in the region of the gall-bladder, which projected itself towards the back. When seen twelve days after the inception of the disease with Professor Nickles, all of the evidences of intra-abdominal suppuration were present. There was no enlargement of the liver, although an indistinct tumor could be found below the costal arch on the right side, which was exquisitely sensitive to touch. There was a slight sallowness of the skin. The diagnosis lay between empyema of the gall-bladder and sub-phrenic abscess.

The operation, done February 28, revealed a normal gall-bladder and appendix; between liver and diaphragm adhesions were found. The wound in

the peritoneum having been closed, search through the adhesions revealed a small sub-phrenic abscess, containing not more than two ounces of pus. It was evidently one of the rare cases which have recently been described of sub-phrenic abscess the result of a trauma, and independent of the gall-bladder and of the appendix.

Given the diagnosis of gall-stones, the question interests, besides the patient, medical men and surgeons alike. What are the prospects from internal medication; what the dangers of operation? When is the time for surgical intervention; what form shall it take? The fact that gall-stones are so often found in autopsies without having made themselves manifest, so far as can be known, during life, does not argue so much for non-intervention as one would think. These are the cases in which the gall-stones did no harm, their presence was not suspected, and they could, therefore, not have been made the object of an operation. When gall-stones do make themselves manifest by symptoms more or less violent and pronounced, it is well known that they may be entirely expelled or be retained within the gall-bladder without doing further mischief. The period during which a patient may suffer is often measured by decades. I may here recall an episode which at the time made me to feel keenly the humiliation to which in our calling we are occasionally subjected, although it well illustrates a point in the prognosis of gall-stones. I was asked by the late Dr. Frank to see a patient, an old lady, eighty-two years of age. She was suffering from acute biliary colic. When we entered the room the patient was in the death struggle. An emotional daughter said, in anything but *sotto voce*, "Oh! had we only called counsel earlier." The relatives quieted the young woman, and I had hoped that my colleague, who was far advanced in years, had failed to hear the remark. When we left the house, after walking a short distance, the doctor said: "I overheard what that young woman said. I have seen this patient through innumerable attacks of gall-stone colic during thirty-five years. Now, at the age of

eighty-two, she dies from gall-stones, and the comment is made, 'Oh! had we only called counsel earlier.' Verily, verily," quoth the doctor, "ingratitude is the wage of this world."

What internal medication can accomplish in cholelithiasis must be left for the consideration of the internists. I have had personal experience in numerous cases in which it, together with restriction of diet, and possibly a trip to Carlsbad or to French Lick, has seemingly put an end to the attacks of hepatic colic. I do not believe, therefore, that every case in which the diagnosis of cholelithiasis has been made is a fit subject for an operation. Furthermore, I am convinced that no complication of cholelithiasis short of secondary malignant disease is so grave but that it may be recovered from. I have twice seen gall-bladder empyema relieved spontaneously when the local and the systemic conditions seemed to make an operation imperative.¹ I have once seen a ruptured gall-bladder terminate in recovery after an abscess of the liver which it produced was opened. Courvoisier tells us that out of 125 cases of intestinal obstruction by biliary calculus, 70 ended in spontaneous recovery. I beg to present a specimen so recovered, and another specimen removed by operation. In view of these facts, unless indications that are vital exist, the suffering of the patient and the frequency of the attack must determine whether or not an operation is to be done. In every case in which the gall-bladder becomes distended, or in which the signs of empyema are made out, or if obstruction of the common duct be present, if only for a short time, an operation should not be delayed. Furthermore, where the diagnosis of gall-stones cannot be made with accuracy, and where from the symptoms one might suspect the existence of adhesions, such as were mentioned above and to which Lauenstein particularly called attention, an indication for an exploratory operation may be said to exist.

As in so many other fields of sur-

gery, the early intervention is the least dangerous. When patients afflicted with gall-stones are informed of the dangers that may arise and of the relative mortality of simple cholecystotomy during the interval, and of choledochotomy in subjects reduced by high fever and by jaundice, it is certain that consent to an operation will not be often withheld.

What shall be the usual operation in uncomplicated cases of gall-stones within the gall-bladder? Notwithstanding the objections that have been made to it, I believe cholecystotomy, with the establishment of a biliary fistula at one sitting, best suited to the average case. The mortality from it is very small. Out of forty-one cases I have had but two deaths. One, my first case, was in a man of seventy-six, who had been intensely jaundiced for six months. The hemorrhage was very severe. I believe that in this case life might have been saved by resorting to Riedel's favorite operation of cholecystotomy in two sittings. The other fatal case was one of empyema of the gall-bladder with high sepsis and jaundice. No stones were found in the gall-bladder or ducts. This patient died twenty-one days after the operation with uremic symptoms. Acute desquamative nephritis was found in the kidneys by Dr. Topmuller, who made the autopsy. It was probably the result of prolonged ether narcosis. No peritonitis was found, nor was there anything in the condition of the wound or gall-ducts to account for the fatal issue.

In another case recently operated death followed forty hours post operationem from intestinal obstruction. My patient was a male, forty years of age, who had suffered during twenty years with severe biliary colic. In recent years it required from two to three grains of morphia as a first injection to relieve the pain. In the intervals there was a continuous dull ache in the region of the gall-bladder. Light attacks of jaundice had been noticed. The patient had passed what was supposed to be a gall-stone three years before. An examination of the powder showed it to be of some lime salt and devoid of cholesterin. Operation under chloro-

¹ One of these cases has since died from perforation of the gall-bladder into the pylorus.

form narcosis, December 30, 1897 (Christ's Hospital). The abdomen was very thick and muscular. The incision parallel to the costal arch was made six inches long. Unfortunately the thorax was a very long one, with the free hepatic margin two inches above the costal arch. The intestine was kept out of the way only with great difficulty, and the gall-bladder covered by the lingual appendix of Riedel could be felt, but by no operation technique brought into view. Within it a single stone could be felt. Cholecystotomy, cholecystectomy and cholecystenterostomy were to me technically unfeasible. In the hope of establishing a ventral biliary fistula along a track limited by adhesions, the fundus of the gall-bladder was caught in the bite of a long forceps and the wound packed about the latter with gauze. The greater portion of the abdominal incision was finally closed. Eight hours post operationem vomiting of bile. During the night the vomiting assumed the regurgitant type. Twenty-four hours after the operation the gauze packing was removed without affecting the symptoms of obstruction. Exitus lethalis in forty hours.

Although in this case I had expected to encounter no operative difficulties, it proved to be the most embarrassing of all my gall-stone cases. It is more than probable that the lamentable result was due to the tight gauze packing, which was made necessary by the tendency to prolapse of the intestine.

The chief objection to the method of cholecystotomy under consideration is the long continuance of the biliary fistula. In most cases the fistula closes in from two weeks to two months. It is very rare for much of the bile to escape from the fistula after the second month. I have the records of only two cases; in one the fistula continued to run for six months and then closed spontaneously, in the other a second operation had to be done with division of a stricture of the cystic duct more than a year after the first operation. It is wrong to call the fistulas remaining after cholecystotomy biliary fistulae. For the most part it is not bile that escapes from the

wound, but a little glairy mucus slightly tinged with bile. There are two things, in my judgment, that have a tendency to keep the fistula open when the obstruction is not in the common duct. One, the suturing of the gall-bladder too far into the abdominal wound or even in the skin, as is not infrequently done. In my later operations I attach the gall-bladder only to the parietal peritoneum and the fascia over it. The other is the use of silk ligatures, which I have supplanted altogether by the use of animal sutures in anchoring the gall-bladder.

(By way of parenthesis, it may be stated that a ligature can become the nidus of a second stone formation, as has recently been shown by Homans before the American Surgical Association.)

Ideal cystotomy, an operation first performed by Meredith and highly endorsed by Bernays, Courvoisier, and many of the French surgeons, would be *the* operation if it were devoid of danger. I have performed it twice, once with success, and in one case, which appeared to me an ideal one for the procedure, death resulted from peritonitis. In this case I thought I had sufficiently anchored the sutured gall-bladder to the abdominal parietes to prevent infection of the peritoneum, even if the sutured gall-bladder should not hold. I think I have performed my last cystendysis. Aside from the apparently greater danger of the operation, other objections can be justly brought against it. The drainage of the gall-bladder and the consequent relief of its swollen mucosa cannot, of course, be accomplished through it. If a single stone has been overlooked, and that is possible, even probable, the object of the operation has failed of accomplishment. In not a few of my cases, although I had believed I had removed all the stones, small calculi would be repeatedly found in the dressings.

A method of cholecystotomy that must not be entirely overlooked is that originally performed by Boggs, and still advocated by Riedel and many other operators. It is the cholecystotomy in two sittings. Its advantages are that it can be quickly performed, if need be

under cocaine, and that the danger of infecting the peritoneum is *nil*. I have never performed it, but believe that in one of my cystotomies fatal from hemorrhage this method of operation might have been followed by a different result. In deeply jaundiced individuals, when cholemia has existed for a long time, and hemorrhages from the mucosæ show what is to be expected in an extensive operation, and when there is a distended gall-bladder, I think that cholecystotomy in two sittings has its proper place. For the ordinary cases of gall-stones it should be discarded. It prevents absolutely the examination of the deeper biliary ways and makes one helpless in the event of an adherent or fixed stone within them. In probably one-third of all cases of biliary lithiasis one or more stones are impacted within the cystic duct. This is at once made manifest by the hydrops of the gall-bladder. It is difficult enough to remove these with one finger in the gall-bladder and the other without. After cholecystotomy in two sittings a second laparotomy must at times be made to remove these deep-seated stones. No operation or wound of the gall-bladder should be closed until the operator has reasonably satisfied himself that there is no obstruction beyond its neck. Exploration of the cystic duct is ordinarily associated with little or no difficulty, nor is the digital examination from without of the upper two-thirds of the common duct difficult in ordinary cases. With the finger in the foramen of Winslow the free border of the lesser omentum can be palpated without any difficulty, as low as the duodenal terminus of the biliary ducts when adhesions are not numerous or of old standing. The difficulty in the way of this palpation may be almost insurmountable. Hartman has called attention to an enlarged lymphatic gland, which I have met in one or two cases, which might very readily impress one as being a soft stone. To the management of the stone in the common duct I shall refer later. No operation of cholecystotomy is complete without an effort likewise to establish the patency of the bile passages by catheterization. In a very large majority

of cases this fails. It has been shown that even in normal subjects catheterization is not always feasible. In some cases the soft bougie passes without any difficulty as far as the Vaterian ampulla, showing that the ducts are free. In most cases, however, owing to an inflammatory thickening of the mucosa or to the catching of the bougie in some fold, or from some tortuosity of the neck of the gall-bladder and its ducts, the progress of the bougie is suddenly checked. The meeting of an obstacle does not mean either a stricture or an obstruction. It is a common experience after cholecystotomy to find that bile does not flow through the cystic duct during the first twelve or twenty-four hours. At the time of the operation catheterization necessarily failed. What was an apparent stricture was relieved with the subsidence of the swelling of the neck and duct of the gall-bladder. With this flow of bile through the fistula the surgeon has cause to feel relieved of his anxieties in the individual case.

Since Langenbuch, in 1882, first extirpated the gall-bladder, cholecystectomy has found many followers, particularly among French surgeons, among whom Pean, Terrier and Thiriar may be mentioned. Cholecystectomy has been held up as the only radical operation for biliary lithiasis. Were it impossible for stones to be formed elsewhere than in the gall-bladder this claim could not be questioned. But it has been established beyond doubt that they can form in the common, the hepatic, and even the smaller ducts. Recurrence after cholecystectomy has been observed, and a number of cases have been recorded in which the overlooking of a stone in the common duct during the extirpation of the gall-bladder has caused the death of a patient. In yet other cases the lethal end was averted by the spontaneous establishment of a biliary fistula after the operation. I have twice performed cholecystectomy, not through choice, but through necessity. In the one case a small shrunken bladder suffered in the efforts to liberate it, as I believe, beyond the possibility of repair. In the second case a large and soft-walled gall-bladder was torn

into during the manipulations in such a way that a fistula could not be established. Both patients recovered, but the operations proved very much more difficult than cholecystotomy. I believe that cholecystectomy should be reserved for cases in which the position and shrunken state of the gall-bladder or the friability of its walls makes the normal operation of cholecystotomy impracticable.

What shall be done with stones in the cystic duct? It has already been stated that in nearly one-third of all cases stones will be found more or less firmly wedged here. As a rule, they can be easily pressed back into the gall-bladder by the finger from without, or forced from their position by irrigation. In the case of soft stones they may be crushed between the fingers or by forceps, after the manner suggested by Tate. In the event of these measures failing, the impacted stone should be directly cut down upon and removed. Primary cystico-lithotomy is the proper procedure. When the stone has been removed the closure of the wound with a continuous cat-gut suture completes the operation. I have thrice opened the cystic duct in this way, without any untoward complication. To prevent possible infection of the peritoneum I have always resorted to drainage and gauze packing in these cases. A cholecystotomy I believe an essential to success when the cystic duct is thus opened. When a fistula has been established no tension whatever can be placed on the sutured wound in the cystic duct, and union goes on unretarded. Kehr has quite recently reported five successful cases to the German Surgical Association (1894).

The acme of difficulties in gall-stone surgery is reached when a stone becomes firmly lodged within the common duct, from which only in exceptional cases it can be dislodged into the duodenum, or brought backwards into the cystic duct or gall-bladder. When any great dilatation of the biliary ways exists behind the stone, the removal of the stone from within the cystic duct may be practicable. Unfortunately, in most cases the stone is firmly held within the duct,

giving at times the impression of a neoplasm. In two cases at least an inoperable neoplasm was supposed to have been found during the operation, and an autopsy later revealed an impacted stone. The question at once arises whether a stone within the common duct should be left to take care of itself and an anastomosis established between the gall-bladder and the duodenum and colon.

I believe cystenterostomy is so advocated in every case by Murphy, the offending body being left to take care of itself. In my judgment this does not appear good surgery. Wherever feasible the foreign body should be removed by choledochotomy. As a factor in the causation of cancer, its importance is of the first order. Cystenterostomy should be reserved for impermeable stricture of the common duct, as shown by the continuance of a biliary fistula, and for malignant disease. If operations on the gall-bladder were performed oftener, as soon as the diagnosis of cholelithiasis had been made, it is certain that operations on the common duct for removal of impacted stones would be relatively less frequent than now. As it is, about 6 per cent. of the operations for cholelithiasis must be made on the common duct.

My personal experience has been limited to three cases out of a total of fifty-three operations made for cholelithiasis and its sequelæ. The fatality of choledochotomy before 1890 was 40 per cent. It has probably been reduced since. From the very condition under which the operation must be done the mortality will always be very considerable. In two of my cases of choledochotomy, cholecystotomy preceded incision into the duct. In the third and only fatal case the gall-bladder was so shrunken that it could only be found with difficulty. It contained no stone. This patient, a man of forty-five, had suffered from impacted gall-stones during three years, was cholemic at the time of operation, and succumbed to hemorrhage within thirty-six hours after the operation. The second and third cases were both in women of over fifty, who had suffered for a number of years, and in whom the tripod of symptoms

characteristic of common-duct stones—pain, jaundice and hepatic intermittent fever—was present. Both of these cases recovered without an untoward symptom from choledochotomy, with primary suture and drainage. A biliary fistula had been established in both of these cases.¹

Other typical points of gall-stone surgery, might be discussed, but since I have had no personal experience with them I prefer to pass them by. I have had no biliary fistula and no common-duct obstruction that could not be relieved by the operations already considered. I have had no opportunity to make a cholecystenterostomy. As already indicated, it doubtless has its proper sphere of utility. If it could once be shown that the bile is not an essential of intestinal digestion, the easier operation of uniting the gall-bladder to the colon would probably supersede the more difficult one of uniting it to the duodenum. Dr. Murphy has recently presented a record of thirty-eight cases of cholecystenterostomies, with one death, and this was not due to the button. Over twenty different surgeons contributed to this list. This is a most brilliant record, although it is quite certain that, so far as value of statistics in establishing the danger of an operation is concerned, this record is no criterion. Being more or less familiar with intestinal operations, I cannot conceive that given the conditions it seeks to relieve such an operation would be practically as unattended by a fatal issue as one would be led to infer from the statistics quoted. I would rather believe that for every favorable case recorded there is at least one that should be put on the other side to make the account correct.

In conclusion, it might not be amiss to present a short *resumé* of my operations for cholelithiasis and its sequelæ from my first operation, performed in 1879. There have been altogether fifty-three operations, performed on forty-eight patients. Forty-one operations were simple cystotomies for the

relief of gall-stone or of hydrops or empyema of the gall-bladder. Of these, two ended in death, both already alluded to in the body of the paper. The one, a man of seventy-six, died of hemorrhage; the other of acute nephritis twenty-one days after the operation. To a third case, fatal probably from packing, allusion has already been made. In three cases the cystotomy was supplemented by incision of the cystic duct, with the removal of an impacted stone. All of these cases recovered. In two cases cheledochotomy supplemented the operation. These cases likewise recovered. In a third case calculi were removed from the common duct alone without cystotomy, with a fatal termination. Cystendysis was performed twice, with one fatal issue. Rupture of the gall-bladder has come under observation twice. In the one case a retro-omental abscess was opened, with recovery; in the second case general peritonitis existed at the time of the operation, which failed to arrest the fatal issue. In one case a laparotomy was done for intestinal obstruction. The stone was found in the ileum about three feet from the ileo-cecal valve. Although the patient was operated on within sixty hours after the beginning of the obstruction, the intestinal paresis was such that it was not recovered from.

In conclusion, I beg to acknowledge my appreciation of the honor your body has conferred on me in asking me to present a paper for its discussion. I must likewise ask that you will forget its length, for which the vast importance of the subject must be my excuse.

MEDICAL colleges in the State of Pennsylvania must now file a bond of \$1,000 in the Court of Common Pleas as a guarantee that they will not dissect any human bodies except those that come to them through the regularly appointed legal channels. This bond is forfeited if they are discovered using any other bodies. The University of Pennsylvania has already complied with the law and the other colleges of the State will soon do the same.

¹ I have learned within the past two days from Dr. Torrence, of Oxford, that one of these patients has a recurrence of symptoms.

APPENDICITIS IN CHILDREN.¹

WITH REPORT OF FOUR CASES.

BY WM. D. PORTER, A.M., M.D.,
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Available statistics bearing on the frequency of appendicitis indicate that it is most frequent between the ages of ten and thirty years, and that it is encountered but seldom in the first ten years of life. This statistical infrequency in the first and most populous decade is doubtless due in part to the difficulty of making the diagnosis. The infant is so prone to serious and even fatal intestinal affections, giving rise to pain and fever, that appendicitis might occur and not be suspected. If it be suspected, difficulties peculiar to infancy are encountered in differentiating the affection. Intussusception, for instance, which occurs with comparatively great frequency in children, may closely simulate appendicitis, and yet decided importance attaches to the distinction, when we consider how unsuitable to appendicitis the appropriate tentative treatment of intussusception would be. In later years of childhood the difficulties of diagnosis are perhaps no greater than in the adult.

An examination of cases reported within the last few years indicates that the disease is about as frequent from the tenth to the fifteenth year as in any equal period of adult life. In adults the most perplexing cases occur in women, in whom inflamed uterine adnexa may confuse the diagnosis. This factor can, of course, be ignored in childhood. In the adult a physical examination is often less satisfactory than in the child, owing to excess of adipose tissue frequently encountered.

Pain, which may be a factor in determining the treatment, and particularly in contributing to a decision as to the propriety of surgical measures, is not so well located by the child, but the intensity of the pain can be estimated more accurately than in the adult. The

child's facial expression and his complaints can be safely accepted as indicating the degree of pain. In adult life this is not so. The face has been so trained to conceal sensations and emotions that the expression is of little value unless the suffering be extreme. Nor can complaints and statements made usually in good faith be properly interpreted without a good knowledge of human nature, and sufficient acquaintance with the individual for a solution of the personal equation.

Taking a general view, it may be said that appendicitis is not usually suspected in the child so promptly as in the adult, but that the diagnosis is no more difficult except in infancy.

The following cases show very different clinical pictures.

CASE I.

On the 28th of August, 1892, I was called to see Joseph L., seven years old. His mother stated that for several days he had shown but little interest in play, that his appetite had been poor, and that he had been constipated. He was complaining of abdominal pain, which recurred at irregular intervals. The pulse was 120 and the temperature 100.5°. There was tenderness in the right iliac region, but no mass could be found.

The treatment embraced a fluid diet, absolute rest, salines to relieve the constipation, and the application of moist heat for the relief of pain. The highest temperature was 101.5° on the third day. From this point there was a gradual subsidence to the normal on the eighth day. There has been no recurrence in the five years which have since elapsed.

Such cases, in which none of the symptoms are urgent, and which run a mild course, are comparatively more common in children than in adults. This belief is justified from a study of reported cases, and is supported on anatomical grounds. The appendix of the child, it is said, is funnel-shaped, permitting of easier expulsion of an offending mass and of better drainage in case inflammation occurs. This peculiarity is also thought to account for

¹ Read before the Academy of Medicine of Cincinnati, December 13, 1897.

the rare occurrence of the disease in the very young.

In fairness to those surgeons who insist on operating promptly in every case, it must be admitted that occasionally there is a change from the mild to the fulminant type in which a fatal issue can be avoided only by prompt and heroic measures. This fact emphasizes the importance of carefully watching such cases in order to promptly recognize any significant change, but it does not demonstrate the propriety of wholesale and indiscriminate operating.

Richardson (*Boston Med. and Surg. Journal*, July 21, 1892), referring to seventy of his reported cases, speaks as follows on this question of operating on all cases: "I have no doubt that the total mortality would have been enormously lessened, but it does not seem to me necessary to apply any rule of indiscriminate operating. There are many cases in which the most enthusiastic surgeon cannot seriously advise the removal of the appendix. Such are the mild attacks of pain, with slight constitutional disturbance, which are so common and which never require surgical aid except in recurrent attacks, which have become unbearable."

The proposition that an operation never increases the danger in these mild attacks can scarcely be proven.

Treves, in his Lettsomian lectures, speaks as follows: "There is no doubt that the nervous disturbance which attends any abdominal operation leads to some degree of intestinal paralysis. This paralysis, attended as it is by vasomotor changes in the bowel wall, is favorable to the absorption of septic matters from the intestine.

CASE II.

Charles D., aged eleven years. This case has a remarkable history. Two weeks before a physician was called he complained of feeling badly and was allowed to stay out of school. During these two weeks he was very quiet, complaining that it was painful to walk. His indisposition was attributed by his mother to constipation, and she gave him several doses of castor oil with indifferent results. She also gave him

occasional sponge baths, noticing that he was inclined to be feverish. In this period he had two restless nights, though he suffered but little at any time. At the end of the two weeks he preferred to stay in bed, and this, together with his failing appetite, induced the parents to send for a physician. Dr. A. B. Isham, the family physician, was called, and on the day following I saw the case in consultation with him. At this time the temperature was 102°, pulse 108. There was distressing rectal tenesmus; suggesting intussusception, but the presence of a well-defined tender mass in the right iliac region led to the diagnosis of appendicitis. We advised an operation and did it the next morning, assisted by Dr. Jas. W. Rowe. By this time the mass could be recognized by sight. The greatest prominence was three inches below the McBurney point, measuring in a line parallel to the axis of the body.

The incision was made directly over the mass, and it evacuated an abscess containing several ounces of pus, which had been isolated from the general peritoneal cavity by adhesions against the abdominal wall. The abscess cavity was irrigated with sterilized water. Not finding the appendix in this cavity, no further search was made for it, and no adhesions were separated, except under the edges of the upper end of the incision, and here just sufficiently to avoid injuring adherent intestines in closing the wound. A rubber drainage-tube was inserted in the lower angle of the wound. His recovery was satisfactory, and he has been well since the operation, which was done nearly two years ago.

There are different opinions as to the propriety of breaking up adhesions to find the appendix after emptying such an abscess. By most surgeons the procedure is condemned, owing to the danger of infecting the general peritoneal cavity.

There are cases in which it is difficult to decide whether or not to break through the abscess wall, not in a search for the appendix, but in a search for other accumulations of pus. The responsibility attaching to such a decision

is well shown in the following quotation from J. W. Elliott (*Boston Med. and Surg. Journal*): "Many patients have been killed by breaking up a local abscess, and many others have been killed because the surgeon had not recognized that, besides the local abscess, there was more pus deep in the pelvis. The skilled finger learns to estimate the strength of the walls of the abscess and to find the direction in which the pus burrows, while the constitutional disturbance helps to decide the probability of more pus in the pelvis or loin." Elliott prefers to make a second incision to drain these regions rather than to break from the first cavity into an uninfected portion of peritoneum.

In these cases of localized abscess an important consideration is the time of operating. There is the danger, on one hand, of operating before the adhesions are sufficiently firm, and, on the other hand, of risking rupture and general peritonitis by delaying too long. Perhaps the safest rule is to operate as soon as a mass can be recognized, as advised by many surgeons. The cases similar to the first one reported, in which an operation is not necessary, and the more serious ones such as Case II, in which an operation is imperative, but in which there can be little or no doubt either of the diagnosis or of the propriety of operating—these may be termed the satisfactory cases. For if the physician feels that he has made a correct and prompt diagnosis, and that he is utilizing the best available treatment, he is undismayed even in the face of danger. But when he encounters serious symptoms, yet is uncertain of the diagnosis, or, being certain of the diagnosis, realizes that his patient is in a critical condition and that he cannot adopt any treatment without doubts whether it is the best treatment, then he has a stout heart indeed if he can bravely face such horrible uncertainties. Such uncertainties probably occur in appendicitis more frequently than in any other acute disease.

CASE III.

Chester C., aged five years. This child was born at the end of seven

months' gestation. He was very small and had apparently but little vitality. At the time of the illness with which this report deals he was still small, pale and delicate in appearance, though for the preceding year his nutrition had improved. His head was large, bordering on the hydrocephalic type.

I was called to see him January 30, 1896, in the night. He had been vomiting and was complaining at intervals of cramping pain in the abdomen. Temperature was 100°, pulse 120. I supposed he was suffering from digestive disturbance, and prescribed calomel. By the next morning he was more comfortable, though the pulse and temperature were the same. By evening he was worse. Beginning to realize that I was dealing with a serious affection, I made a careful examination, discovering decided tenderness in the right iliac region. This, together with the sudden onset of the case and the persistency with which the pain recurred, led to the diagnosis of appendicitis. On the third day there was little change, except that the temperature had risen to 102° and the child was more restless. No mass could be made out, but the tenderness was undiminished. On the fourth and fifth days there was an improvement in all the symptoms and a speedy convalescence was anticipated. Early on the sixth day he was suddenly seized with severe pain, requiring the free use of morphine. Tympanites rapidly developed. There was bilious vomiting. The pulse became weak and rapid, and nothing was lacking to indicate acute general peritonitis. Dr. A. W. Johnstone saw the case with me, but an operation was regarded as hopeless. Death occurred the following morning. Post-mortem examination was not permitted.

This was probably a case in which the first symptoms were those of perforation of the appendix. Nature attempted to wall off the infection, with temporary success. The protecting wall of lymph finally gave way and the infection rapidly spread. Had the diagnosis been made on the first visit and an operation done promptly the prognosis would have been good.

CASE IV.

On the 4th of January, 1895, I was called to Belle C., eleven years old. This girl, eighteen months previously, had had an attack of appendicitis, which terminated with a discharge of pus into the bowel. Twice since she had suffered mild attacks of abdominal pain lasting a few days. At the time I was called to see her she was suffering with sharp abdominal pain, and had been vomiting. The temperature was 101°, pulse 112. There was tenderness in the region of the appendix. These symptoms and the previous history left no doubt as to the diagnosis. The attack was mild but persistent, with little change in the general condition for fifteen days. During this time hot moist applications had been sufficient to relieve the pain. On the sixteenth day she complained so bitterly of pain that morphine was given. At this time there was dullness in the region of the appendix, but a tumor could not be recognized. On the seventeenth day there was an escape of pus through the bowel, and her symptoms promptly abated. When the patient was dismissed an operation was advised as soon as she regained her strength.

I heard nothing from the case until five months later, when she was brought to my office by her mother, who feared that the child was about to have another attack. She was sent to the Training School Hospital. After thorough purgation with salines the symptoms all subsided. The operation, however, was earnestly advised. Consent having been secured, the operation was done June 22, 1895. Drs. A. W. Johnstone, J. W. Stevenson and C. E. Caldwell were present and assisted in the operation.

The incision was made at the outer border of the rectus muscle. There were no adhesions to the abdominal wall. A search was made for the appendix with the finger, but without success. The incision was enlarged and the cecum brought outside to facilitate the search. When about to conclude that the appendix was really missing a small sinus was noticed near the junc-

tion of the small intestine and the cecum. This was followed up until several square inches of adhesions had been separated. The cecum and small intestine had completely surrounded the appendix, which was readily found in the midst of the adhesions. It had been considerably deformed by the inflammations, being only a couple of inches long but fully an inch in diameter. Its walls were much thickened. It contained a half-drachm of pus. The patient made an uninterrupted recovery.

It was fortunate that an operation was not made during the acute attack which terminated with the escape of pus into the bowel. For in case the abscess is enclosed in a mass of adherent intestines, with no adhesions to the abdominal wall, operation is difficult, and there is danger of lighting up a general peritonitis. On the other hand, there is perhaps an even chance that the abscess may rupture into the peritoneal cavity instead of into the bowel.

While this case illustrates the advantage of operating in an interval, it also shows how difficult it is to get consent at such a time. It would not have been granted in this instance had not an acute attack been feared.

[FOR DISCUSSION SEE P. 112.]

Injections of Alcohol in Carcinoma.

Alcohol favors cicatrization in all growths like struma, angioma, cysts, lymphatic-gland tumors, sarcoma, carcinoma, and especially carcinoma of the breast and cervix uteri. Under its use, in fifteen out of eighteen cases of carcinoma of the breast, the growth gradually dwindled away, until in a year there was nothing left but the connective tissue stroma, and there has been no return. Five cases of carcinoma of the cervix also recovered completely, and the patients are still living and in good health. The effect on the general health is even more surprising. The pains and uneasiness pass away, and sleep, appetite, assimilation and strength return in a most remarkable manner.—HASSEL.

STRONTIUM AND ITS SALTS.¹

BY ALEXANDER B. BRIGGS, M D.,
NEW YORK, N. Y.

There seems to be an impression that there is more or less danger in the use of the strontium salts from their toxic effects; this is wholly an error, as has been proved by the researches of such men as Professor Germain Sée, Dr. Constantin Paul and Dujardin-Beaumetz, who found that, in every instance where conflicting reports and toxic effects have been reported from their use, they were due to the presence of barium, which is found in the commercial product. When I have prescribed these remedies I have always used the pure salts (Paraf-Javal) or their solutions prepared by P. Chapoteaut, of Paris. At present I think strontium and its salts are unofficial in the pharmacopeia, but, nevertheless, the discovery of their therapeutical properties, and the good results in therapeia that have followed their administration, would warrant us in the belief that as they become better known and more often prescribed, they will become more highly appreciated.

The salts that I have most frequently used are the bromide, iodide and lactate, and I will speak of them in the above order.

Bromide of strontium is a colorless, transparent salt, occurring in hexagonal crystals. It is somewhat deliquescent. The dose is from five grains to one drachm. It is not incompatible with the bromides of the alkalies, and it is soluble in both water and alcohol; it can be administered with all the alcoholic tinctures and most fluid extracts. Its indications for use are those of bromide of potassium, and, while it is a perfect substitute for the potash salt, its prolonged use even in large doses does not seem to produce the untoward results so often noticed in the use of the former salt. The gastric disturbances, the cutaneous eruptions so often noticed in the use of the potash salt, are not seen

when the strontium salt is used; again, the depressing and systemic agitation from the prolonged use of the potash, which all have encountered in practice, I have never seen from the strontium bromide.

In cases of epilepsy and other spasmodic neuroses, where the potash salt has been given for a long time, the patient thereby becoming insusceptible to its action, the strontium salt may be substituted with safety and great advantage.

In many diseases of the stomach the bromide salt will be found of especial benefit. In three obstinate cases of vomiting of pregnancy in which I have prescribed the drug during the past year, two received signal benefit, while in the third case it seemed to have no marked effect upon the vomiting, as the stomach would not retain the remedy; in this case it appeared to have some reflex effect upon the vomiting centre, when given in drachm doses per rectum every six hours, and it was so administered for several days in connection with other treatment.

In one case of hyperesthesia of the stomach that accompanied and followed ulceration for several weeks after I was satisfied the ulcer had healed, the neuroses promptly yielded to ten-grain doses of the drug, given one-half hour before food, and there was no return of this most distressing symptom.

A patient suffering from exophthalmic goitre about a year ago consulted a specialist in regard to a severe tinnitus aurium from which she suffered; bromide of potassium was prescribed in full doses. At first the patient seemed to get some relief from the remedy, and it was continued for several months; during this time the patient developed severe mental excitement with true delusions. Suspecting the remedy, it was discontinued, and in a few days the mental excitement subsided, with a marked increase of the tinnitus. At this time strontium bromide was substituted with full as good effect upon the symptom, and the patient has continued to take it during the past three months, with no return of the mental excitement; the delusions continue, however.

¹ Read before the Washington County (R. I.) Medical Society, July 8, 1897.

We are occasionally consulted by a class of patients that are plethoric; who complain of a general feeling of lassitude, frontal headache, constipation, a disposition to sleep all the time, various skin diseases; the urine is loaded with urates, and frequently the heart's action is feeble, due to commencing fatty degeneration; these patients are sometimes fat, other times lean, but are always overfed. Any or all of these symptoms may exist, but will surely be relieved by the use of bromide strontium administered before meals, accompanied by a restricted diet.

In other cases of digestive disorders accompanied with acid fermentations, and the formation of the gases of decomposition, with chronic diarrhea, the bromide has given me excellent results.

Strontium iodide occurs in colorless, transparent, hexagonal crystals, having a bitter saline taste, freely soluble in water and alcohol. Like the bromide salt, it is incompatible with solution of the sulphates and carbonates of soda, potash and lime, but is not incompatible with other iodides.

Iodine of strontium is an excellent tonic and alterative, and may with safety be prescribed in any case where the potash salt is indicated. In quite an extended use of the drug, I have never known it to induce the gastric irritation or palpitation of the heart so common in the administration of iodide of potash in full doses. Its effects in catarrhal asthma, chronic bronchitis and cardio-pulmonary affections have been most satisfactory. The drug is quickly eliminated by the kidneys, the strontium seeming to supplement the action of the iodine by its own peculiar action on the functions of nutrition.

In connection with the above, I wish to report the following case:

Mr. B., aged about seventy, has had a catarrhal bronchitis accompanied with asthma for the past ten or fifteen years. At the time the strontium salt was prescribed he presented the following conditions: Catarrhal bronchitis of both lungs, with paroxysmal attacks of asthma; bad cough, with profuse expectoration; has been unable to lie in bed for over two years; body emaciated,

appetite poor, urine scanty, no sugar or albumen present, marked arterio-sclerosis, edema of both feet and legs; pulse 100-120 per minute; mitral insufficiency, with dilatation of the heart; takes little food. For several weeks from one to three pints of water had exuded from the feet and legs every twenty-four hours. The patient had been treated with iodide of potassium at various times, always with considerable relief, but he had been unable to continue the drug for any great length of time, or in anything like the full dose, on account of the gastric irritation which it produced. We began the treatment with ten grains of strontium iodide every six hours; subsequently the dose was increased to twenty grains. Within one week all the symptoms had improved. The cardiac functions were better performed, the asthmatic attacks had subsided, and within one month the patient was able to move about the house. The remedy has been continued about every other month during the year, and I have seen the patient at work in his garden within the past week.

From my observations of the action of the iodide of strontium, I am satisfied that it is safe to prescribe it as a substitute for the potassium salt, and while the dose is about the same, the remedy can be pushed to a dose far beyond the limit of safety with the potassium salt, and that without fear of producing symptoms of intolerance.

Strontium lactate is a white granular powder, odorless, and has a slightly bitter, saline taste. Soluble in about four parts of water and freely soluble in alcohol; dose from five to sixty grains. Cases are reported where as much as 160 grains have been administered with no untoward effects. The lactate has been often prescribed for Bright's disease, both in acute and chronic forms, with excellent results. Constantin Paul concludes that it is indicated in parenchymatous nephritis, the rheumatismal and gouty forms, but is not useful in interstitial nephritis. Dujardin-Beaumez confirms these statements, and says that when he had administered the remedy in cases of albuminuria he has obtained uniformly a reduction in the

quantity of albumen passed; that while it affects the most important symptoms favorably, it does not remove the pathological condition. The remedy possesses the advantage over other drugs in the treatment of this disease, in that it promotes the appetite, aids digestion and assimilation, and can be administered for a long time continuously with no bad effects.

In two cases of albuminuria of pregnancy, in which I have made use of the lactate, the most gratifying results have followed. In one case where there was severe headache, insufficient urinary discharge, general dropsy and the symptoms of uremia present, and where diuretics, purgatives and diaphoretics had signally failed to give relief, the lactate was substituted in fifteen-grain doses every four hours, with a marked diminution of all the symptoms and with a decrease of more than one-half the amount of albumen excreted within forty-eight hours. The improvement in the general condition of the patients was noted from the beginning of the treatment.

In several cases of cystitis in the aged, due to hypertrophy of the prostate, the drug was given in connection with buchu, with marked amelioration of the symptoms. Although the lactate does not seem to possess any diuretic properties, nevertheless its action upon the urinary organs seems to be salutary in the extreme.

Professor Germain Sée, in the treatment of affections of the stomach, considers the strontium salts as far superior to the alkaline carbonates.

Bartholow states that the phosphate of strontium appears to rather improve the appetite, promote the activity of assimilation and increase the body-weight. The phosphate more especially is a reconstituent, an agent having the power to increase the nutritive energies. Recently the salicylate of strontium has been highly extolled in the treatment of rheumatism. I have, however, had no experience with the drug.

For a number of years I have been satisfied that many of the untoward symptoms that follow the use of the potash salts in full doses, are due as

much or more to the potash which they contain, as to the iodine or bromine. As we all know, potassium is always a poison, even in small doses when often repeated. In bromide of potassium, potash constitutes one-third of the salt, and when given in large doses it cannot fail but exert its toxicological effects.

Well-known authorities have long ago demonstrated that there was far less danger in the use of the sodium than the potash salts.

If we have in the strontium salts remedies that can be used in full doses and for a long time without the unfortunate effects that sometimes follow the use of the potash salts, it behooves us to give our patients the benefit of the fact.

Proper Cardiac Stimulants in the Presence of Pericardial Effusion.

Cardiac stimulants are of value in cases of pericardial effusion; the question is which one to employ, and in the opinion of the writer digitalis is the least favorable. This drug greatly increases the diastole of the heart, enlarging its cavities and making it fill the pericardial sac much more completely than it does under normal circumstances. In other words digitalis, by increasing the dimensions of the heart during diastole, really adds to the difficulty of this viscus, which is already pressed upon by the effusion which is in the pericardial sac. Certainly it seems much more rational to employ in such cases not digitalis but some remedy like strychnine or strophanthus, alcohol or ammonia, which will support the heart, increase the activity of the circulation, and yet not materially alter the space which is required within the pericardial sac for normal cardiac activity.—*Therapeutic Gazette*.

DR. RUMBOLD, SR., says that the functions of the middle-ear muscles are to select and amplify such sounds as the listener desires to hear most distinctly, making it appear that the ears have muscles of accommodation quite analogous to those of the eyes.

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of December 13, 1897.

The President, W. E. KIELY, M.D.,
in the Chair.

W. EDWARDS SCHENCK, M.D., Secretary.

[TELEPHONE NO 1981.]

DR. W. D. PORTER read a paper
entitled

*Appendicitis in Children, with Report
of Four Cases (see p. 105).*

DISCUSSION.

DR. J. L. CLEVELAND: I have been interested in Dr. Porter's report, especially the second case, in which it is shown how nature, in many cases, takes care of the patient. I infer, judging from my own experience, that these circumscribed abscesses frequently occur, for I have opened a number of them, and with uniform favorable results. When the abscess is clearly defined, as I have seen it in children, opening it by simple incision, in my experience, has always been successful.

DR. JOSEPH EICHBERG: I think that we all are liable to agree with the last speaker. I challenge the essayist to confound appendicitis with intussusception in children. I would like to ask him how many cases of intussusception he has observed in children. Of course, we find this latter condition sometimes post-mortem in children, but it does not exist ante-mortem. The text-books mention the condition as often occurring, basing the assertion upon the post-mortem finding, but those of us who have made many autopsies know from our experience that this condition seldom exists ante-mortem, and I am confident that the number of cases seen by *all* the Academy members could be counted upon the fingers of one hand. In children intussusception commences at the ileo-cecal valve and extends downward, and is felt as a tumor, which is different from that of appendicitis. The con-

servative treatment is the best; purgation I believe does more harm than good. Appendicitis in children is difficult to diagnose, because the appendix lies behind the large bowel, and the constitutional symptoms are not so marked. The diet of the child consists largely of milk, which is liable to form intestinal concretions. A recent case was a child, four years old, in whom the peritoneum was studded with pigmented growths and the appendix contained a milk concretion.

DR. JOSEPH RANSOHOFF: I believe the previous speaker is quite right, that it is not difficult to differentiate appendicitis from intussusception. I recall three cases of the latter; two were operated upon, while the other was moribund and beyond aid. Regarding the age of appendicitis cases, they are exceedingly rare under five years; at least they are seldom under that age that come under the observation of the surgeon, yet the first case that I had in 1888 was three and one-half years of age.

In reference to the proper time for operating, early or late, if when seen early, no tumor and abscess forming, there is no need of haste; I would rather operate between the tenth to fourteenth day than the sixth to seventh day, for early the walling off is not as firm as later, and there is danger of infecting the abdominal cavity, though I think we might wall it off sufficiently with gauze and prevent such infection, if it were necessary, but I prefer to make the operation later, especially when you are without trained assistants, which in many cases you are. This condition depends upon the judgment of the operator far more than any other in the domain of surgery. These fulminant cases from the first inception of the disease give evidence of a fatal issue unless operated upon early. They never had a previous attack, when they will have an attack of sudden violent pain and evidence of an intense poisoning, the face with that anxious expression that tells that if not operated upon soon there will be a fatal issue. This is often the result of a twisting or plugging of the bowel, and we have to deal with a

gangrenous condition. Just such a case I saw with Dr. H. M. Brown, and when we opened the abdomen we found the appendix black and the bowel gangrenous; he could not be saved.

As regards the removal of the appendix in all cases, in my opinion the essayist showed good judgment in not searching too long for the appendix. I don't do so very long, especially when it is embedded in the abscess and I cannot bring the cecum out upon the abdomen. I don't search for the appendix; I may make a mistake in not doing so, but prefer to open the abscess and drain, and in such instances I have never had a recurrence, from which, if I should be so unfortunate as to personally have an abscess, I would tell them to open the abscess and let the appendix take care of itself.

Certain of these cases get well without interference, and I do not believe in operating upon all cases. It was only the other day that a doctor brought his brother to me to have his appendix removed. I asked the patient if he had had pain? He replied that he had not. How many days have you had to lie upon your back? None. Any temperature or sickness, and how many days were you incapacitated from your occupation? None, but I think my appendix should come out. I think that man went home with his appendix; at least he left my office with it in his possession.

I fear there is too much indiscriminate removal of the appendix. Recently I was called to Madison to operate upon the niece of a doctor for appendicitis. The table and nurse were ready when I arrived, and they told me that the patient had just recovered from the attack. I advised that probably she might recover without a scar; that we had better wait. As I was departing a gray-haired old lady, who had been told of my advice, said: "Doctor, how thankful I am for your decision!" and then she said that she had come from New York and from a doctor acquaintance who had survived an appendicitis operation with a fecal fistula. When you are certain of two good attacks then you should determine to operate.

There is no field where the judgment and conscience of the surgeon should come into play more than this of appendicitis. Simple gall-stone operations have died of peritonitis.

DR. MERRILL RICKETS: I have operated upon but two persons under eight years of age. I believe that the appendix should be found and removed in 95 per cent. of cases. There should be but little difficulty in making the diagnosis in cases of acute appendicitis, especially in the male, but the difficulty arises in the chronic cases—those cases which are pronounced "intestinal indigestion," "ureteral colic," etc. In the chronic forms of appendicitis fever is many times entirely absent, as is also rigidity of the abdominal muscles, tumefaction, and dullness upon percussion. Chronic or periodical tenderness in the appendicular region is *prima facie* evidence of appendicitis in the male.

Wyeth uses a 40 per cent. solution of antipyrine for capillary hemorrhage, not only following appendicitis, but operations upon various other parts of the body.

DR. H. M. BROWN: I have seen a number of these cases that were considered appendicitis get well without surgical interference, and also a number of such die and their malady attributed to enteritis or general peritonitis, which in the more modern surgical light are proven to be appendicitis, that could have been saved by surgical procedure, to my mind demonstrating that there is no condition which so taxes the judgment of the surgeon as to the proper course to pursue.

That we have a return of the inflammation after the abscess has been opened and the appendix left *in situ*, I have no doubt. I recall one case, a lady, for whom I opened and drained an appendiceal abscess full half-dozen times, and another, a physician, who had a like experience. This was before I had ever heard of the disease called appendicitis, yet they both fully recovered. In another case the burrowing of the pus was so extensive that I made the incision low down in the left thigh near the knee. There was such a great amount of discharge, in which there

was fecal matter, that I was so alarmed as to plug up the opening to prevent exhaustion; but in my absence, while the patient was asleep, it broke loose, and such an amount of pus and fecal matter as was sufficient to run down from the bed to the floor and form a stream which extended ten feet to the other end of the room was evacuated, and still this patient did not succumb to the disease.

Unfortunately, many surgeons are so constituted in their nervous system that they can with difficulty abandon the operation when the abscess is opened and pus wells up into its field. But once in they are irresistibly impelled to make a persistent search for the appendix, and thus many lives are sacrificed that might be saved if only the operator had the courage to desist and leave the circumscribed abscess cavity intact until such time as all pus formation has been cleared away and a secondary operation may be undertaken without fear of general infection.

DR. EDWIN RICKETTS: One case I recall had an abscess that was opened upon the posterior part of the ilium; the abdomen was opened in this case, and revealed a sloughing appendix. Another case that I had recently had a sinus, similar to the first, and opening the abdomen we also found that it was due to an appendicitis. From my experience and observations of all the treatments, the surgical one, to me, appears to be the most successful.

DR. A. W. JOHNSTONE: The third case reported had a happy issue by discharging into the intestine, but they all do not do so, and it is not always advisable to wait for this to occur. I agree with Dr. Ransohoff that after the second attack the abdomen should be opened. In one such case, when I came down upon the appendix I found that two of its coats were gone and the pus was ready to rupture through the last one. The fulminating kind are already moribund when seen by the surgeon, so that very little can be expected from operative measures. One such case was a little child in whom the temperature was subnormal; I waited for a reaction, which came next morning, and when

the abdomen was opened pus ran out, but the patient died.

The discussion recalls my student days, at which time Senn—McBurney at that time was his pupil and demonstrator of anatomy—would lecture upon peri-typhlitis, and say not to operate until the fourteenth day. I see the opinion of to-day favors such a course.

DR. J. A. JOHNSTON: Appendicitis is more likely to be mistaken for typhoid fever than intussusception, especially in the milder cases, on account of sordes, dirty tongue and tympanitic abdomen. Intussusception usually causes recession of the abdomen over the site of the cecum, while appendicitis, if it does anything, will at least prevent recession of the abdominal walls at this point.

In children especially there is one indication that has a great deal of weight with me in determining what cases to operate upon and when. That indication is dullness on percussion extending above Poupart's ligament when attended with other symptoms of appendicitis. Dullness is almost a guarantee that the inflamed parts are well walled off from the general abdominal cavity, and then the operation resolves itself into a simple oncotomy. Without dullness and adhesions to the anterior walls an opening large enough to deal with the appendix in a child is more serious than in an adult.

DR. RANSOHOFF: This is a dangerous doctrine. Don't wait for dullness.

DR. T. LOUIS BROWN: I have always understood that the appendix is the analogue of the fourth stomach, and it is strange to me that nature did not cut it off like she did the thirteenth leg in some animals.

DR. W. E. KIELY: My experience has been limited to two cases; one was supposed to be a perforation of the bowel. There was distension on the right side in this case, which I thought was due to retention of urine, and the catheter withdrew a quart of urine. I advised purgation with broken doses of salts, but their doctor objected; nevertheless, it was given, and in forty-eight hours her bowels were open again, and a perfect recovery resulted. Another

call was from a doctor in Newport, to a girl aged fifteen years; next day she was collapsed and died. Another case I recall vomited all afternoon; the abdomen was distended, and there was no difficulty in diagnosing intussusception. An operation was advised, but they objected and she died. The more one sees of these cases the better he knows what to do.

DR. W. E. SCHENCK: This subject of appendicitis has been well discussed, and points of differentiation between it and similar conditions, as those of intussusception and typhoid fever, considered; also was the proper time to operate brought into the discussion; yet it appears to me there has been a very important aid in diagnosis and in deciding the proper time to operate apparently overlooked, *i.e.*, the *blood examination*, in this condition.

In appendicitis we have a *leucocytosis*, while in uncomplicated intussusception and typhoid fever we do not, especially in the latter, in which the reversed condition exists, that of *leucopenia*, from which it is easy to see the *differential value* of this method.

Now as to its value in deciding the proper time to operate:

Leucocytosis means pus, abscess.

Leucocytosis stationary, that abscess is walled off.

Leucocytosis increasing, spreading abscess.

Leucocytosis declining, favorable course.

From which we conclude that a steadily *increasing leucocytosis* is a bad sign—*operate*; while a steadily *decreasing leucocytosis* is a good one—*don't operate*.

DR. PORTER: The difficult problems in appendicitis which have been referred to in connection with the cases reported were mentioned not with the idea of offering a solution to such problems, but in the hope of calling out discussion along these lines by those of wider experience.

In this country the tendency to suicide among children is increasing to an alarming extent.—*Med. Age.*

Correspondence.

THE BRADLEY CASE.

LEBANON, O., January 17, 1898.

Editor LANCET-CLINIC:

In the LANCET-CLINIC for January 1, 1898, I find that E. D. Miller, of Parker Ford, Pa., desires information regarding a case of eight children at one birth which seems to have been published some twenty-five years ago in the Cincinnati *Lancet and Observer*. As I happen to know something about the circumstances connected with this phenomenal case, I will cheerfully give them.

Many years ago, when studying medicine in Trumbull County, O., I knew, personally, Timothy Bradley (not Bradlee), the husband of this very prolific lady. He resided near the village of Johnson, in the aforesaid county, and was of a good family. He had a brother who was a physician and a member of the Ohio Legislature in, perhaps, 1850. Tim, as everybody called him, was unmarried when I knew him. He was quite eccentric, and just a little bit wild. In his courtships he seemed to have "many strings to his bow." For a long time it was a puzzling question with the gossips of the neighborhood as to whether Tim Bradley would ever marry. But he finally did marry, and his choice for a companion was a lady of unusually large size. In due time she gave birth to twins, possibly triplets. Some of Tim's old chums, on whom he had perpetrated many a joke, started the report that Mrs. Bradley had fairly flooded her husband with babies. Some said three or four, others five or six, and a few as high as seven or eight. These ridiculous stories, which were started for the purpose of pestering Tim Bradley, soon got into the press and went the rounds of the newspapers and medical journals of the country. However, there was quite a difference among the publications as regards the number of babies involved in the case. Probably many of the wonderful cases of fecundity we see published in the papers originated

in about the same manner as this Bradley case.
S. S. SCOVILLE.

RHEUMATOID ARTHRITIS.—Rheumatoid arthritis is a chronic progressive disease with an almost hopeless prognosis as regards a complete cure. The most that can be hoped for is to arrest its progress for a longer or shorter time, and to render the patient's life more tolerable by improving his health and relieving the pains in the affected articulations. Galvanism, massage, baths and an invigorating diet have been found of more or less value, as well as the administration of cod-liver oil, ferruginous preparations and the iodides. A comparatively new remedy that seems to have a promising future before it in treatment of this disease is lycetol. Judging from the observations thus far published its use in rheumatoid arthritis is capable of effecting considerable improvement. One of its distinct advantages is that, owing to its pleasant taste and freedom from irritating effects, its administration can be kept up for a long time, a point of great importance in the treatment of chronic affections, in which remedies must be given for a prolonged period before beneficial results can be expected. In two cases recently reported by Dr. Paul Norwood (*Times and Register*, November 6, 1897), one being a very bad one of chronic rheumatoid arthritis, the results were very encouraging. A slow but steady improvement occurred in the second case, while in the first the patient provoked a recurrence by discontinuing the treatment. In view of the obstinate character of the affection and its resistance to the remedies heretofore in use, lycetol should be certainly considered an eligible remedy in these cases.

A WINTER REMEDY.—That codeine had an especial effect in cases of nervous coughs, and that it was capable of controlling excessive coughing in various lung and throat affections, was noted before its true physiological action was understood. Later it was clear that its power as a nervous calmative was due, as Bartholow says, to its special action on the pneumogastric nerve. Codeine stands apart from the rest of its group, in that it does not arrest secretion in the respiratory and intestinal tract.

The coal-tar products were found to have great power as analgesics and antipyretics long before experiments in the therapeutical laboratory had been conducted to show their exact action. As a result of this laboratory work we know now that some products of the coal-tar series are safe, while others are very dangerous. Antikamnia has stood the test both in the laboratory and in actual practice, and is now generally accepted as the safest and surest of the coal-tar products. Five grain "Antikamnia and Codeine Tablets," each containing $4\frac{3}{4}$ grains antikamnia, $\frac{1}{4}$ grain sulph. codeine, afford a very desirable mode of exhibiting these two valuable drugs. The proportions are those most frequently indicated in the various neuroses of the throat, as well as the coughs incident to lung affections.

THE
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DR. J. C. CULBERTSON,
317 W. SEVENTH ST., CINCINNATI, O.

CINCINNATI, JANUARY 29, 1898.

Editorial.

ASSOCIATION.

Multiplication of integrals gives strength. Organization is equivalent to acquired power by multiple of integrals. This is a principle which must be recognized and carried into effect in the medical profession. The saw is an old one, and the teeth must all be filed and shaped for effective work. Nearly, if not quite, every State in the Union now has its State medical society, some of which are strong and proportionally influential.

The State societies of Ohio, Kentucky, Indiana, West Virginia and Illinois are good working organizations, and yet do not embody in membership anything like the number of physicians within those States who are eligible. For instance, in Ohio the number enrolled and in good standing varies few from one thousand active members, whereas the possible enrollment is five times that number. There is about the same ratio in the States named. A revival of interest that will gather in 50 per cent. of increase this year should be

inaugurated. Ohio is well in the front, and yet, as observed, is far behind normal conditions.

There is work to be done and plenty of it in scientific lines. All of medicine is not known, and there are fallow fields for breaking up in all directions. Every year produces something new that is an advance over the old and past. This must and will go on. The delvers in the unknown are all of the time at work, and the light from their labors will not be obscured, but is always shining brightly at State and other medical society meetings.

The annual meetings this year will be of more than ordinary interest. Questions pertaining to legislative action are liable to come up. Physicians are citizens in the very broadest sense of the term, and because of their peculiar relation to the general body politic are very much in evidence before the people.

* * *

There is a constant hope upon the part of the public that medical men will continue to lavish their services for little or no compensation. The pendulum has swung in this direction to the extreme. Of its own weight, in obedience to the law of force of gravity, it is turning in the other direction. Seal-skin garments, elaborate retinues, jeweled habilaments and a' that have had their day in dispensaries, clinics and free hospitals. Those who seek pauper channels for professional services must wear the garb of their condition.

Heretofore the dental profession has been less crowded than the medical, but it will not long be so at the rate that is now being paced. In consequence of past conditions, dental clinics are now the ones most abused. Self-preservation will soon right the

wrongs of this sort of business. Attention is merely directed to it for a show, indicating that it is perceptible to the naked eye of observers.

A scheme recently proposed in hearing of the writer seems to be a most excellent one, which is a requiring of every one in attendance at a clinic for service the presentation of a card, filled out with the name and residence of the holder, signed by a well-known citizen, certifying that the applicant is in indigent circumstances and deserving of clinic or hospital assistance. To know that an applicant is poor is sufficient, but such information should be given in order to prevent imposition.

Hundreds and thousands of dollars are being diverted from dentists, physicians and pharmacists. The more the evil is looked into the greater becomes its apparent magnitude.

* * *

Some counties in this and adjoining States are without a medical society. There is not a county having ten physicians that should be without its society. The advantage of such organizations cannot be questioned. They bring respect from the people, and add to the social influence of the profession.

Lately it was stated in hearing of the writer that local county societies were regarded as objectionable by the people, because it was there that fee bills were made and advocated for an oppression of the public. Of course, this is a wrong impression, and even if true the society would be justified in its course. Every class of people looks out for the main chance in the way of remuneration for services rendered. Railway companies are obliged to unite on traffic rates, and tradesmen for the season's wages. Union for compensation prevents imposition, unifies conditions, tends to elevation and well-being

every time. Trusts are combinations for control of any special commodity. A physicians' combine to work as a trust is entirely out of the question. The people need not have any fears on that score. Their notions, where there are any, in this direction may be completely dispelled by inviting the local clergy and some other influential persons to be present. This will be a good thing to do in very many instances. It will be a showing that physicians' fees are not rendered for the few minutes of time expended in making a call, but that he carries into his daily life continuous thoughts as to methods of treating his cases. This will be not only information, but an education to very many who have supposed physicians' charges are high and based upon the time spent in making calls. Not infrequently a single case will fill the mind of a physician to an exclusion of nearly everything else.

* * *

The hospital question continues to be very much alive in the minds of scores of practitioners, and in it there is always involved the impositions which are being practiced upon the tax-payers, and yet more upon the medical profession.

The number of physicians who are allowed the peculiar privilege of standing in on the superintendant's service in the Cincinnati Hospital is exceedingly small, and perquisites are correspondingly large. There is a similarity to a multiple placenta with corresponding umbilical attachments, all focalizing in one body. Does this require a detailed explanation? Well, hardly any; at least none to speak of. It is about now worth any man's ten minutes to make a wee bit of an analysis of the component parts of the staff of the Cincinnati Hospital. Talk about

reciprocal spinal curvature conditions! It beats any freak ever exhibited in a dime museum for uniform lopsidedness. By comparison, typical cases of opisthotonos or of Charcot's hysteric women are not in it. Three-fourths of a circle are complete, and just why the other segment is left out is incomprehensible. No doubt there are those who do understand just why the segment is not there, but really it is harder to determine than why perpetual motion machines are not perpetual in their behavior.

Academy of Medicine of Cincinnati.

Telephone number 1981 belongs to the telephone placed in the Academy's hall for the use of its members during meeting nights.

January 31: Case reports with discussion.

The Diagnosis of Renal Permeability by the use of Methylene Blue.

Achard and Castaigne (*La France Méd.*, No. 26, 1897, p. 410) propose to use methylene blue as a means of diagnosis in circumstances where it is desired to gain information as to the functional condition of the renal substance. They found that with healthy kidneys the test material was rapidly eliminated by the urine, communicating to it a distinctive color, while a retarded elimination corresponded with more or less diseased conditions of the parenchyma. In certain of their cases they were able to follow the variations in permeability during the stages of convalescence from an acute affection, and on the other hand to trace, by defective elimination, the progress of lesions which were at same time indicated clinically by the increase of anasarca and albuminuria. Considerable edema, it was found, did not hinder the absorption of the methylene blue and its consequent appearance in urine. The methylene blue is given by hypodermic injections, and these should be made deep into the tissues. No injurious effects have been observed. —*Quarterly Med. Journal.*

EDITORIAL NOTES.

REPORT OF THE HEALTH DEPARTMENT OF CINCINNATI.—Following is the statement of infectious and contagious diseases for week ending January 21, 1898:

	Cases.	Deaths.
Measles.....	22	..
Diphtheria.....	9	..
Scarlet Fever.....	9	3
Typhoid Fever.....	7	1
Phthisis Pulmonalis.....	6	18
Membranous Croup.....	..	1
Pertussis.....	8	2
Varicella.....	7	..
Total.....	68	25

The mortality report for the week ending January 21, 1898, is as follows:

Croup (membranous).....	1
Influenza.....	2
Scarlet Fever.....	3
Typhoid Fever.....	1
Whooping-Cough.....	2
Other Zymotic Diseases.....	5-14
Cancer.....	6
Phthisis Pulmonalis.....	18
Other Constitutional Diseases....	3-27
Apoplexy.....	4
Bright's Disease.....	2
Bronchitis.....	10
Convulsions.....	3
Enteritis.....	1
Heart Disease.....	1
Meningitis.....	2
Nephritis.....	3
Peritonitis.....	2
Pneumonia.....	18
Other Local Diseases.....	15-61
Deaths from Developmental Diseases..	14
Deaths from Violence.....	6
Deaths from all causes.....	122
Annual rate per 1,000.....	15 66
Deaths under 1 year.....	20
Deaths from 1 to 5 years.....	12-32
Deaths during preceding week.....	119
Deaths corresponding week 1897.....	132
Deaths corresponding week 1896.....	143
Deaths corresponding week 1895.....	145

HEALTH REPORTS.—The following statistics concerning yellow fever and small-pox, have been received in the office of the Supervising Surgeon-General of the U. S. Marine Hospital Service during the week ending January 22, 1897:

YELLOW FEVER.

Cases. Deaths.

Mississippi:		
Edwards, Jan. 20	1	..
Cuba:		
Habana, Jan. 7-13.....	4	..
Manzanillo, Dec. 15-31.....	7	
SMALL-POX.		
Alabama:		
Birmingham, Jan. 20, small-pox epidemic.		
Georgia:		
Atlanta, Jan. 17, 131 cases now under treatment.		
Jan. 18-20.....	6	..
North Carolina:		
New Hanover Co. Jan. 14.....	1	..
South Carolina:		
Swansea, Jan. 15, small-pox reported.		

New Theory of Cheyne-Stokes Respiration.

In a clinical lecture at the Brompton Hospital, Dr. Maguire stated that not even Felehn's view of the pathology of this condition was satisfactory. He showed that in disease, great depression of the cerebral higher centres was an invariable accompaniment, that in health the phenomenon occasionally occurred in adults during deep sleep, when the higher cerebral control was relaxed; very frequently during sleep in infants and idiots, in whom the cerebral controlling apparatus was imperfectly developed. He said that there was evidence to show that the respiratory centre in the medulla was controlled and kept in balance by a higher cerebral mechanism, and asserted that yawning and involuntary sighing were instances of irregular action of the respiratory centre when relieved of control by exhaustion or depression of the higher centres. He related experiments which proved that removal of the cerebral hemispheres produced Cheyne-Stokes respiration in the frog. It was shown also that lower centres when relieved from control, or when exhausted, were prone to show in their action irregularity of rhythm. Dr. Maguire therefore concluded that Cheyne-Stokes respiration is caused by a stormy unbalanced action of the respiratory centre, due to a depressed vitality of itself or of its higher controlling mechanism.—*Clinical Journal.*

Selections.

FROM CURRENT MEDICAL LITERATURE.

A Unique Case of Anemia.

[The extraordinary case recorded below will profoundly interest every thoughtful physician, both from its singularity and from the importance of the instruction it affords: a case of obscured anemia—so obscured by every appearance of robust health—that not the slightest guiding indication of the real trouble appeared, until a microscopical diagnosis, which evidently had never before been thought of, revealed a form of anemia, or blood-degeneration, most serious from its obscurity, and from its peculiar line of development. Unable to learn of a counterpart to this case, from cursory examination of the literature or from the experience of eminent consultants in New York, we should feel much obliged for any experience of a like character that others may have had, or may have heard or read of.]

Miss G. H.—, Ohio; aged twenty-four; American; anemia. First seen November 6, 1897. This case had been under treatment by various physicians for two years, but the patient got no permanent relief. Some of the physicians had treated her for malaria; some for neurasthenia; some for chronic hepatitis; and still another, for uterine trouble. Casually observing the patient, any one might justly have exclaimed, What a perfectly healthy specimen you are! Not only was her complexion florid, and her figure rounded and full, but her functions—namely, menstruation, bowels and action of the kidneys—were altogether normal. It was a hard case for diagnosis. The only symptoms apparent were that at times she became exhausted after some trifling exercise, and at other times lapsed into a faint without apparent cause; nor were these attacks accompanied with hysteria: she merely complained of being weak and tired. The attacks of fainting were periodical,

with at times complete unconsciousness; at other times were such as might be called *le petit mal*. Outside of these occasional symptoms, there was every external evidence of health in the fullest sense of the word. The patient said, however, she had noticed that her hair seemed to have grown a bit lighter within the last three or four months.

My first step was the microscopic examination of the blood, which is indispensable for intelligent diagnosis, especially in cases of this obscure description. The blood was about normal in color to the eye; microscopically, however, the picture was decidedly abnormal. One cubic centimeter of blood showed but 1,500,000 red corpuscles, with a decided overplus of white cells. The red cells were in the various stages of disintegration and paralysis. The hemoglobin was not more than 20 per cent. of the normal quantity. In one specimen of blood from the hand of the patient, the red corpuscles were absolutely devoid of color: this being a most unusual picture, and indicating, in my mind, the initial cause if not a beginning, of fatty degeneration, a subject too extensive to be discussed within present limits.

It was accordingly determined to put the patient on the following simple course of treatment. Night and morning she was massaged with alcohol, and instructed to take plenty of outdoor exercise; at the same time observing great care in dressing to avoid catching cold. From the first, the patient thoroughly enjoyed the taking of bovine, and consequently a large quantity was immediately prescribed: a wineglassful every three hours, during the day, in milk. Within the first forty-eight hours, the patient felt very much improved, remarking, "Why, doctor, do you know, I feel stronger and brighter already! I know this treatment is doing me much good." The treatment was continued up to the 22nd of November, when a microscopic examination of the blood showed that the quantity of hemoglobin was increased to fully half the normal. The number of red corpuscles had also increased considerably. Since November 14 there

had been no fainting spells. In fact, the patient said she hadn't "an ache or a pain." The quantity of bovine was now increased to a wineglassful five times a day. November 30, microscopic examination of the blood showed the red corpuscles to be already quite normal in quantity. The hemoglobin lacked but about one-eighth of the normal standard. From the 14th to this date, the patient had continued free from attacks of any kind. She will continue under observation for fully five weeks longer, and reports of the case may be made from time to time; certainly, in case of less favorable appearances.—*Sound View Hospital Report.*

Turpentine as a Remedial Agent.

James B. Walker (*Therapeutic Gazette*, July, 1897) calls especial attention to the value of turpentine in subacute and chronic catarrhs and as a hemostatic. He considers that the chief causes of the neglect into which this remedy has fallen have been the large dose formerly employed (half an ounce), and its administration as a distasteful emulsion. In gastric cases with decided irritability it is best given in suspension, not as a gummy emulsion, but in the form of a mixture to be made at the bed-side by stirring from two to ten drops of oil of turpentine in an ounce or two of water well sweetened with saccharum anisi of the German pharmacopeia. The sealed capsule is to be preferred in cases in which irritability is not a marked symptom. The author finds it of great value in hematemesis due to gastric ulcer, and also in that arising from chronic alcoholism. It is of equal value in subacute and chronic catarrhal conditions of the gastro-intestinal tract. In catarrh of respiratory system, with free secretion, its value is exceptional. In the catarrhal conditions of phthisis its remedial effects are easily appreciated, and it ranks with creosote and guaiacol. In the hemorrhages of phthisis it should hold first place among drugs. The author believes that in small doses in cases of chronic catarrhal nephritis which are under close observation it is often beneficial. In

chronic cystitis and in urethritis it is of extensive usefulness. In hematuria and some cases of metrorrhagia it is a valuable hemostatic.—*Quarterly Med. Journal.*

Joseph O'Dwyer, M.D.

Dr. Joseph O'Dwyer, who achieved an international reputation by demonstrating the practical applicability of intubation of the larynx as a substitute for tracheotomy, died of tubercular meningitis on January 7, at the age of fifty-five. When he was attacked by his last illness he made the diagnosis of the disease, which was confirmed by Drs. Delafield and M. Allen Starr, and at once recognized the hopelessness of his case.

Dr. O'Dwyer was for many years associated, as visiting physician to the New York Foundling Asylum, with the late Dr. J. Lewis Smith, and the late Dr. Charles Carroll Lee, and it was in the ample clinical field afforded by the wards of this institution that intubation was established on a firm basis by himself and later by Dr. W. W. Northrup in conjunction with him. He was a graduate of the College of Physicians and Surgeons, New York, in the year 1866, and was as remarkable for his modesty as for high attainments.—*Boston Med. and Surg. Journal.*

Dr. Zacharin.

Dr. Zacharin, the eccentric physician to the late Czar Alexander III, and lecturer on the functions of the heart at the Imperial College of Medicine at Moscow, died January 5. He gained notoriety in 1894 on account of his controversies with Dr. Leyden, of Berlin, and other physicians who were called in consultation, with regard to the diagnosis and treatment of the Czar's fatal illness. He refused to sign the official report of the Czar's death and threatened to leave Licadia, where the Czar died and return to Moscow. He was prevented from doing this only by a command from General Tischer. So bitter had been the disputes among the consulting doctors, and so pronounced had been Zacharin's eccentric actions, that the death of the Czar was indirectly laid at his door, and when news of

the passing of Alexander III reached Moscow a crowd of people, urged on by students, tore down the doctor's house and burned his furniture in the street. The new Czar Nicholas II, however, soon forgave him, and made him a present of a jewelled snuff-box, and the students gave him an enthusiastic welcome.

Dr. Zacharin was eccentric in his dress, and was brusque and exacting with his patients, compelling them to sit motionless before him, and not to irritate his sensitive nervous system.

His fees were exorbitant and in addition to the payment of these he demanded, even of patients of the highest rank, that all his whims be respected. He compelled the Czar to alter the arrangement of the furniture in the rooms he occupied in the palace.

He is said to have declined to lunch with the Czarina, on the ground that he was not in the habit of taking his meals with women, and to have attended the Czar in a dressing-gown and a peasant's top boots.—*Boston Med. and Surg. Journal*.

Mr. Ernest Hart.

Ernest Hart, editor of the *British Medical Journal*, died in London on January 7. He was born in June, 1836. He was educated at the City of London School and the School of Medicine attached to St. George's Hospital. At one time he was ophthalmic surgeon and lecturer on ophthalmology at St. Mary's Hospital. He rendered great service in exposing defective arrangements for sick poor in workhouses, his efforts leading to the passage of Hart's Act and the creation of the Metropolitan Asylums Board. His reports on criminal baby farming in 1868 led to the passing of the Infant Life Protection Act.

Mr. Hart was Honorary Chairman of the National Health Society and President of the Medical Sickness, Annuity and Life Assurance Society. He was appointed editor of the *British Medical Journal* in 1866, and for several years was responsible for the editorial conduct of the *Sanitary Record* and the *London Medical Record*.

Translations.

NOTES FROM THE HISTORY OF MEDICINE.

FROM THE WORKS OF DE BORDEU.

TRANSLATED BY T. C. MINOR, M.D.,
CINCINNATI.

SECTION III.

*Remarks of Pasquier on the Druids—
Their Medicine—Translation of a
Eulogy on Medicine Made by a Poet.*

One of the most celebrated magistrates of the Parliament of Paris said, more than two hundred years ago, on the subject of the Druids, that they pretended to have cultivated medicine in Gaul; "that they were so avaricious as to put everything down in writing; that of all the undertakings of the French nobility we have almost complete knowledge in manuscripts, and, besides, of history presented to us on money of base alloy; and it were sometimes more useful to receive such pleasures than to see our published victories with such masques as they are; so much so that we should truly be ill at recognizing in truth the greatness of our ancestors."

We shall not go into details of what LeClerc and others report of the Druids and their medicine, and thus increase the number of histories pictured on money of base alloy. What difference does it make in the subject we treat of whether we know or do not know some of the phrases that escaped from Pliny and from Cæsar on the dances and grimaces that the Druids made around old oak trees, or the ridiculous pomp they employed at harvest time, not to mention their oak tree mistletoe and two or three other plants? What of the songs they taught the young Druids, eh? Who will ever complain or regret that the good Tiberius destroyed this species of fanatics?

No one doubts that in those long past ages children had many distresses as well as diseases, the same as their mothers before them; people grew old then even as they do now; they had chronic maladies and particular diets to

quiet them; medicinal remedies, the same as methods, for dressing wounds.

While the Druids danced in their somber retreats, while they pretended to burn up on certain days their golden sickles and other marks of pride, while they taught songs to their young people, and from time to time immolated a few to their superstitious fury, honest empirics practiced medicine in their homes, at the homes of their neighbors, too, and among their outside friends; they communicated their discoveries likewise, as well as their reflections thereon. They imitated what they saw done by the more sensible men in each community. That was the useful work of every day.

It was the reign of empiricism, as well as that of *Astræa*. Happy days, of which no traces remain save in the most far-off places among our villages! Tenderness united all hearts then; each one assisted his neighbor; children were instructed by their parents. While the mother attended to the cares of the household, she likewise awaited the coming of her dear husband from the fields. Numerous families listened to the words of wisdom that fell from the lips of the aged, who reasoned on their own experience and that of their ancestors. Those were Arcadian days!

Were the husband or children sick? The old people showed the way to help them, using the remedies they had tested. The care of the young girls and married women was confided to the grandmothers and old maids of the quarter. If the aged, overcome by years, approached the moment of paying tribute to nature, their old friends and relatives assembled at their bedsides; they appeared, too, with the remedies indicated by all the world; those were employed that the wisest man of the hamlet selected.

The bitter complaints, or rather the murmurs, of the children of luxury were not heard then, along with the muscular weakness and the pusillanimity that goes with the world of fashion; they did not know the tumultuous assemblages of cities or their remedies, drugs heaped up on each other, that only tend to embitter the diseases and overcome the sick; where advice, too often dictated by the prejudiced, is as plentiful as the

effects of the different medicines. The patient, or those who had the authority to decide for him, chose the most appropriate remedy by instinct; for the remainder, ordinary tastes were fitted to the symptoms of the malady.

The ancient Babylonians used to expose their sick in public places where they could secure the advice of the passers-by, whose assistance was employed; they excited the tenderness and commiseration for themselves; they did not pretend to amuse the curious of the world, as some persons have claimed. This exhibition most likely only occurred in the cases of long and obstinate maladies. Such was the assured progress and the simple manner of empirical medicine.

Daughter of Apollo, the same as *Æsculapius*, Medicine lamented the departure of her brother, whom Jupiter had given over to death; she hid in the far-off, most deserted and least inhabited of places; she ran as though distracted, without daring to fix on any permanent habitation. Hippocrates spied her by chance at the foot of an arid mountain; he soon fell deeply in love with this young nymph, whose graces betrayed her origin, and in whom the sunbeams and fatigue had not changed a regular and majestic face of beauty.

"Where runnest thou, charming maid?" said Hippocrates to her. "Why flyest thou into almost uninhabited places, where thou only beholdest adorers unworthy of thee?"

The nymph, touched by the air of candor and the good looks of Hippocrates, answered with much modesty but with confidence: "It is thou I have sought and cherished above all other human things; I will make thee greatest of all physicians; I will divide my share of immortality with thee!"

Hippocrates approached her; he consented to live under her laws, and made her a present of a light, loose-fitting robe, pure and simple in style, that dazzled the eye by its snowy whiteness.

The ancients cultivated medicine under this honest and natural dress. Galen, after several centuries, disdained this simplicity, clothing Medicine in grotesque costumes, that the painful

work of the art made a burden to bear; he changed the lily-white robe into one of brilliant scarlet, put ornaments on Medicine's poor head and pendants in her ears, loaded down the goddess so heavily with jewelry that she could no longer be recognized. Then Avicenna passed his days bedizening and masking her sweet face more and more. Each succeeding doctor who came along presented her some gew-gaw trumpery; they all tried to variegate and multiply her robes.

Paracelsus appeared. Medicine, overcome by the weight of useless jewelry, soon perceived that Paracelsus was an issue of the gods, one ten thousand above ordinary mortals; she opened her heart to this legitimate adorer; she complained of all the insults offered her, of all the ridiculous ornaments put upon her; she wanted to go back to her simple snow-white dress, the lily robe of the ancient times. Paracelsus became her confidant, and supported her in these happy opinions against her former courtiers. "Who will give me a mirror," said she, "so that I can arrange my robes for the pleasure of the gods and reasonable men?" It was Van Helmont who presented her with this mirror; it was made from the blood of Hippocrates; he tore into pieces and cast off all the barbarous knick-knacks that the Goddess of Medicine was weighed down with. She asked the gods to unite her to Van Helmont, and her prayer was granted."

That was the way a poet, a friend of Van Helmont, prepared the high reputation, afterwards acquired, for the doctor's wares. Medicine, daughter of the gods, wandered away into the country thereafter, and kept away from the cities. Hippocrates went to search after her again; he found her and again arrayed her in a simple, modest robe; that is empirical medicine.

The great world, the pride of the sciences, the pomp of art, make Medicine hideous and unnatural; she would have been lost without Van Helmont. Yet she was founded on nature; as said before, she has always existed and always will exist. The misfortunes and worry inflicted on her can only be tran-

sitory, especially in well-policed communities. Justice ever watches over Medicine; would that the poet had said that, too. Justice impresses respect from the detractors of Medicine; it will ever protect her from false adorers. Yet still, at times, she allows herself to appear wearing different ornaments and under assumed names.

SECTION IV.

Systemic or Reasoning Empiricism—We Know not if the Egyptians Knew it—Acron Introduced the Fashion Among the Greeks—Erisistratus and Herophilus were Perhaps Empirics—Clinical Physicians—Serapion and Hereclides Celebrated Among the Empirical Sect.

Empiricism extended from the country to the towns and cities. Some empirics aimed at writing and disputation; they formed a body of doctrines based on their opinions; this was not with the object of making them known, since the simple traditions of fathers to their children, to disciples from their masters, sufficed for this sect to spread their doctrines throughout all the world, and, so to speak, in every head.

Yet the empirics saw themselves forced to bring out their practices and principles, in order to oppose them to the pretensions of philosophers, who flattered themselves they would unite all medicine in the general rule of philosophy. It began to give way to the torrent, and as philosophy or disputes upon first causes made great progress, all the world required physicians who could reason and dispute like philosophers; this gave rise to a form of empiricism that might be called systematic.

The Egyptians appear to have been but little occupied with physical causes; they were lost in a sort of obscure and difficult metaphysics; at least we have learned that their medicine was arranged in a system that was intermixed with their theology and laws. Bacchus, Zoroaster, the different Hermes, the priests, cultivated medicine; but this was assuredly only as pure and simple empirics, wholly corrupted by false ideas of religion.

The progress made by Moses in Egypt, and what we know of medicine among the Hebrews, gives very little light on the profane history of bygone ages, so that we can count on but few facts. Now, these facts do not decisively settle whether the physicians of Egypt were divided into different sects, or whether they disputed on empiricism or held different dogmas, etc.

It was not the same among the Greeks; they were ardently in favor of spreading science abroad, of parading their doctrines, taking the people as judges, as, just to the contrary, the Egyptians were careful to conceal their knowledge and to envelop it in a mysterious language, the ordinary resort of pedantism. We know the celebrity of Thales and Pythagoras, who each founded a particular sect of philosophers.

Acron, a famous physician of Agrigento, was almost the contemporary and compatriot of Empedocles—a most decided Pythagorean, too. Philosophers could not be prevented from speaking of medicine, that which doubtless displeased Acron; he hoisted the flag of empiricism, already well known to mankind; he resisted the philosophers who vilified experience, mother of all knowledge; he separated from these great reasoners; he wrote works of which only the titles are extant; he fought probably the application of philosophy to medicine; there remain slight traces of his union with Empedocles.

Here, then, we have the empirics contesting with physicians as theoreticians. The disciples of the principal chiefs of this dispute multiplied, and behold!—philosophic or systematic empiricism on a parallel with dogmatic medicine.

We are forced to believe the interview of Democritus and Hippocrates reduces itself to precisely that which has come down to us regarding their conversation. The inhabitants of Abdera were alarmed at the condition of Democritus, and, deeming him insane, called on Hippocrates to visit him; they had no confidence in the lights of philosophy; they called on the doctor. This is, so to speak, the theory that has

recourse to the practice, or at least the first is not regarded by those who interested themselves in behalf of Democritus, considering the philosopher as one whose knowledge was of no use. This is the natural tendency of mankind.

Democritus studied anatomy; Hippocrates felt the value of this occupation; he was already well advanced in his speculations; he perhaps used reflections that tended to render his medicine a kind of admixture of physics and pure empiricism; he had at least a chance to compare his own knowledge with that of the greatest theorist of his time. These two great men, Hippocrates and Democritus, did not contend against each other like Acron and Empedocles. Hippocrates said little, like all true empirics, while Democritus expatiated like the physicians.

From the time of this interview the philosophy of Aristotle and that of Plato occupied all minds. Erisistratus and Herophilus gave a singular *eclat* to medicine by their discoveries in anatomy. Herophilus enjoyed the more brilliant reputation; he made surprising progress in anatomy; his school existed long after him, and enjoyed a great reputation; at the present day the names he gave some portions of the human anatomy are still used. His reputation was widespread; it has come down to our modern generation perfectly intact, ever to be respected by those able to feel the true value of his discoveries and magnificent anatomical work.

If the pagans did not regard him as a god, Fallopius, a Christian physician, regarded the decisions of Herophilus as a kind of articles of faith. He essayed to write the anatomical history of the nerves; he was the first to mention the pulse, or at least he made this matter a body of the doctrine that opened up the road to the discoveries afterwards made in this matter. He was the first to lay down the law to doctors that the pulse must be felt; those doctors who preceded him were not enslaved by this custom, as *all those physicians who followed him have become*. (Is there a living physician to-day who does not feel the pulse? What physician has ever read a treatise on the pulse like that of Bordeu's? How

long would the public employ a physician who did not feel its pulse, no matter how little he knew about it?)

Herophilus, meantime, like Erisistratus, was half empirical, and perhaps might be put into this sect as following Galen, who agreed that Herophilus was a complete man in all matters relating to medicine. Would one believe, after these known facts, handed down by history, that Erisistratus and Herophilus can be treated as men who have made only a transient reputation? Can we imagine, after what has been said of Herophilus, that each age has had and will have its charlatans and its dupes? What! Herophilus a charlatan! Is it because they foolishly imputed imaginary crimes to him? Is it because he misled them on the subject of the pulse? We can, it is true, somewhat reproach him on this latter point. Galen reports that Herophilus had written strongly and at length of the cadence of the pulse, that it was obstructed, and that he had spread these absurdities abroad; it was Le Clerc who made this remark. He added very judiciously that this might be pardoned in a man who wrote for the first time on this matter. Le Clerc goes no further; he calls charlatans only those who sell or make and vend pills and boluses enwrapped with little printed instructions.

However it may be, it appears that after Erisistratus and Herophilus the empirics were a little bit confounded with the philosophers; but this mixture did not last long, it is true, as Celsus has pointed out that medicine at that time was separated into three principal branches, *i.e.*, diet, pharmacy and surgery, that which does not make the three sects known at the present time. There is reason to believe that the empirics occupied the second and third ranks, leaving the first place to those who loved to reason. So, better than ever, we distinguish the clinical doctors, or those who visited the sick at their bedsides, from those who went to consult among themselves and who were only physicians.

The clinical doctors graduated the dose of medicines and administered them, choosing the proper moments for

that and learning what was necessary to do while the remedies were taking effect. These details, into which philosophy disdained to enter, made the basis of empirical medicine; it was reasoning or methodical empiricism.

Such was the medicine of Serapion, who gave more fashion to empirical medicine than even Acron, who never called on anything but experience, rejecting the theories and arguments of the philosophers and dogmatic doctors. Such was the method of Heraclides Tarentin, the most famous of empiric physicians, who followed Galen, a man who never told anything but the truth, even when defending the interests of his own school or sect—one who never reported anything that he had not experienced himself.

These great men had many disciples; the latter, like their masters, pretended that experience alone was sufficient to show the remedies proper for disease; they left reasoning to the dogmatists; they said that chance made them find remedies, that different trials made designedly or otherwise established the usage preserved by history; and that, finally, comparison, analogy, the connection found in an unknown with a known disease, would serve to guide physicians in extraordinary cases. Eh! What can one put forth more reasonable than these reflections, which are, so to speak, even now the daily language and the usual logic of practitioners of medicine?

For the remainder, we need not speak of all the empirics known in ancient times. We find in the records of history several names of empirics that still preserve favor on account of their beautiful treatises, not by means of catalogues and sterile lists. The Greeks never dreamt of charging the records of medicine with this useless weight.

[TO BE CONTINUED.]

THE Pennsylvania Hospital and University of Pennsylvania have been left about \$2,000,000 by a lady of Philadelphia, contingent on the death of some relatives of the deceased.

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**WHAT TREATMENT SHALL
WE ADOPT FOR PULMO-
NARY TUBERCULOSIS?¹**

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Of all the evils evolved from Pandora's box, and transmitted with unabated vigor to the present day, none now deserve the careful attention due to tuberculosis.

Insidious in its approach and attack, and essentially chronic in its mode of action, its presence has never been regarded with the fear and dread entertained for the occasional, but more active, advances of other plagues; but still, when the casualties are compared, how appalling is the record! One-seventh of all civilized mankind succumbs to the attack of the bacillus tuberculosis, while modern investigations further show that one-third of the inhabitants of civilized lands are engaged in the contest. Truly, the conflicts of nations fade into insignificance upon comparison. One-third of mankind is engaged in the contest, of whom 43 per cent. succumb. Judging by the results, we see that the contestants must be of almost equal strength and the battle necessarily long.

Before attempting to reply to the query, What treatment shall we adopt for pulmonary tuberculosis? it will be well for us to consider the contestants and their methods of attack and repulse, as intelligent and satisfactory treatment must depend upon our knowledge of

the nature and results of the factors we are endeavoring to combat.

The announcement of the discovery of the tubercle bacillus by Koch, on April 10, 1882, as the cause of consumption has now universal acceptance. The tubercle bacillus is a strict parasite, requires a temperature of about 39° C. for its successful propagation, retains its vitality in desiccated sputum for several months, and in putrefying material for from forty to one hundred and twenty days; it is not destroyed by the gastric juice, but can resist the effects of sunlight for from only a few minutes to several hours; it can exist in diffuse daylight for five to seven days, and in an ordinary dwelling retains its powers sixty to seventy-five days.

Bacteria differ greatly as to the particular tissue in which they can develop, and the rapidity with which they produce manifest disease; the tubercle bacillus slowly invades the body, and, month after month, destroys the tissues in which it has its habitat. The tolerance to its toxins is so great that patients may live for years; in fact, some maintain that death is never caused by the bacillus tuberculosis or its products, but by the toxins of the bacteria that find on the tubercular lesions favorable conditions for development.

As a result of the local action of the tubercle bacillus, we observe the phenomena incident to the process of inflammation, the products of which, however, while related to inflammatory new formations of tissue, do not present the ultimate conditions of that process, but are characterized by lack of organization, absence of blood-vessels, etc., forming a nodular growth, containing, in a more or less extensive reticulum, epithelioid cells derived from the pre-existing cells of the tissues, small

¹ Read before the Academy of Medicine of Cincinnati, December 20, 1897.

round cells, multinuclear cells, fibrin, etc. The centre soon undergoes fatty degeneration, which is usually preliminary to the coagulation necrosis which ultimately occurs throughout the nodule. This degeneration of the tubercle is not due entirely to the absence of blood-vessels, but to the influence of the bacilli and their products. In many cases, particularly in individuals who possess great powers of resistance, sclerosis or fibroid changes may take place in and around the nodular mass, and this is the process by which the disease is circumscribed and its centrifugal progress stayed. With the expulsion, absorption or calcareous degeneration of the tuberculous nodule, and the ultimate decrease in the size of the resultant cavity by the contraction of the cicatricial tissue comprising the walls, a spontaneous cure is effected. Apart from the formation of tubercles, the lesions of pulmonary tuberculosis are chiefly inflammatory in character, the products undergoing the same caseous degeneration as the nodules; thus an entire lobe or even an entire lung may be converted into a solid, necrotic mass of tissue, as in caseous pneumonia.

Viewed in the light of modern experience and research, heredity, diathesis and susceptibility, while still received with respect, are not accorded the importance once accredited as factors in furnishing a favorable soil for tuberculosis; it is by infection, and not by inheritance, that a phthisical parent, in the vast majority of cases, transmits tuberculosis. The researches of Squire show the influence of heredity, as ascertained in the examination of one thousand families, to be but 9.51 per cent., the percentage of offspring of phthisical parents subsequently becoming tubercular being 33.16 per cent., and of non-tubercular parents being 23.65 per cent. We thus find that the liability to acquire tuberculosis depends upon a depreciated physical condition, which may be inherited, but is usually caused by faulty environment, occupation, habits, and precedent diseases, such as syphilis, pneumonia, alcoholism, diabetes, cancer, etc.; and the diminution or absence of the un-

known power of resistance—call it vital energy, or what you will—which condition is usually termed hypotrophy, and may be either congenital or acquired.

In considering the subject of the therapeutics of tuberculosis of the lungs in the light of modern clinical research and experience, the prospects do not seem as forbidding as one would infer if he gained his information from pathological and bacteriological studies only; nor are the conclusions based upon the latter methods of study entirely satisfactory, as the results of treatment obtained from inoculated animals, in which the disease is an acute affection, are different from what may take place in a chronic form of the disease.

The fact that from one to seven billions of tubercle bacilli are daily expelled from the lungs of a patient in whom the disease is somewhat advanced seems almost appalling, and is significant of danger when we reflect upon the freedom with which they are distributed, precluding all doubt of the fact that we are continually receiving and destroying them. This is proven by the examinations made by Strauss of the nasal secretions of healthy persons employed in public buildings. Out of twenty-nine hospital attendants, nine were infected; of nine employés in a public library, in one the bacilli were found, and out of seven theatre employés, one was infected. These investigations indicate, therefore, that like the germs of diphtheria and pneumonia, the tubercle bacilli are always at hand, awaiting a favorable opportunity to develop. Yet even after the disease has developed and a lung has been injured from a slight degree to complete annihilation, the patient's life need not be despaired of, as it is not so much the extent of resultant injury as the factors—manner of attack, chronicity of progress, complications, secondary infections, etc.—which predict the result.

That tuberculosis of the lungs is curable in a majority of cases is shown by the statistics of many observers. I will only cite the results of Trudeau at the Saranac Cottage Sanitarium. Of ninety-one cases, nineteen were appar-

ently cured; in thirty-one the disease was arrested; eighteen showed no improvement, and one died of tubercular peritonitis.

What cases, then, offer us the encouragement of success? We may state, as a general rule, that any patient who improves in weight, and whose temperature at its maximum height is never above 100° , offers us hope, and if the temperature never exceeds 99° we may feel almost positive of success. And these factors are of more prognostic importance than the indications we derive from physical examinations. I will illustrate this fact by presenting the reports of the following cases:

CASE I.

A little girl, ten and a half years of age. This is a case of uncomplicated tuberculosis of the lungs, and is the only case of incipient tuberculosis admitted to the hospital. In this case the apex of the right lung is involved. The moist râles have disappeared, dullness, sibilant râles and increased vocal resonance still persist. She has been in the hospital twenty-one weeks, during which time she has increased fifteen and one-fourth pounds, her original weight being fifty-one and three-fourths pounds; her temperature but seldom rises above 99° . The average pulse-rate for the first week was 104, and is now about 90. Her average respiration for the first week was 31 a minute, the rate now being 23.

CASE II.

Male, aged twenty-seven years; duration of illness, eighteen months. Physical examination showed upper portions of both lungs to be extensively involved. Patient remained in the hospital thirteen weeks, during which time he increased eight pounds in weight. The average temperature range of the first week was 100.9° , of the last 99.5° . There was no diminution of the pulse or respiratory rate. Feeling much improved, he left to resume his duties, those of a traveling salesman. Physical examination showed no improvement in the condition of his lungs, while a suspicious huskiness led us to infer that his

improvement would be of but temporary duration.

CASE III.

Male, aged forty-five years; duration of illness, six years. Physical examination revealed essentially the same conditions as were found in the preceding case. He has been an inmate of the hospital eighteen weeks, during which time his weight has increased six pounds, while the average temperature range does not indicate any perceptible improvement. The pulse and respiratory rate are increased. The progress of Cases II and III are essentially the same. The weights increased for a time, but the diurnal range of temperature, by indicating the septic processes, which, sooner or later, are ingrafted upon the tubercular lesions in the lungs, proves the improvement can be but transitory, and that the toxins produced by the germs of suppuration will soon again have a preponderating influence, and lead to a disastrous end.

CASE IV.

Male, aged forty years; duration of illness, one year. Has been in the hospital twenty-three weeks, during which time his weight has increased twenty-seven and one-half pounds; the pulse-rate has decreased, and the respirations are not quite as frequent. The diurnal variation is not so great as when admitted, and the temperature is nearer the normal line.

CASE V.

Male, aged thirty-eight years; duration of illness, three years. Has been in the hospital ten weeks, during which time his weight has increased seventeen pounds. There is a marked improvement in the range of temperature; the pulse-rate for the past week is ten beats lower than that during the first week after admission, while the respirations have been reduced from 32 to 28. The physical examination of Cases IV and V indicates about the same conditions as are found in Cases II and III, while their continuous favorable progress leads us to hope for more favorable conclusions, as we are certainly

justified in the belief that the advance of the morbid processes in the lungs is being successfully resisted.

CASE VI.

Male, aged forty years; duration of illness, fifteen months. Physical signs indicate consolidation of both apices down to about the second ribs. Patient expectorates large quantities of mucopurulent matter at times, and his cough is frequently very intractable. This is a case of bronchiectasis with ulceration of the bronchial mucous membrane. He has been in the hospital sixteen weeks; during the first twelve weeks he gained seven pounds, but he has since been losing weight, due, no doubt, to slight hemorrhages that occur very frequently. The patient has always been very intemperate, and his course seems to be that of patients with this inclination.

CASE VII.

The effects of alcoholism are better shown by this case. Male, aged thirty-four; duration of illness, six months; has been in the hospital sixteen weeks. He has progressively lost weight since being admitted, although physical examination did not discover any more involvement of the lungs than was found in the preceding cases. His temperature, like that of some of the following cases, did not indicate by the great diurnal variations (the streptococcus curve) any excessive amount of septic infection, so that we can only conclude that by the excessive indulgence in alcohol all powers of resistance and recuperation have been rendered inert.

The histories of Cases VIII and IX I present simply to indicate the progress of the disease in its acute form.

CASE VIII.

Male, aged twenty-four; had not felt well for the past two years, but continued at his work until a short time before applying for admission to the hospital. The streptococcus curve was well illustrated in this case, as was also the case in Case IX, who was a colored man, aged forty-six years, and sick

seven months before applying for admission. His history and the course of the disease illustrate well the usual progress of pulmonary tuberculosis in persons of his race.

CASE X.

This case, while showing upon physical examination a condition of the lungs that would lead us to expect a favorable progress, is handicapped by tuberculosis of the genito-urinary tract.

CASE XI.

I present this case to illustrate the progress of fibroid phthisis. The patient is a male, aged forty-five; duration of illness, seven years. His weight increased twenty-nine and a half pounds during the first nineteen weeks stay in the hospital, but, owing to an acute broncho-pneumonia occurring at the base of the right lung, his weight decreased ten pounds, but is again upon the upward grade, and his respirations have diminished from 32 to 27 a minute; the pulse is also slower, and the temperature indicated the conditions characteristic of a favorable progress.

In attempting to solve the query, "What treatment shall we adopt for pulmonary tuberculosis?" the current literature will prove almost as embarrassing as helpful. I shall not, therefore, attempt to give a *resumé* of the various therapeutic methods suggested, but shall indicate the conclusions deduced from the observation and treatment of the sixty-three patients admitted to the branch hospital for consumptives since July 8.

I am aware of the fact that in no other disease is time of as much importance in testing the value of conclusions as in tuberculosis of the lungs, but it can also be readily inferred, from the histories of the cases just read, that even the most sanguine would be pardoned for hesitating before predicting favorable prognoses. I do maintain, however, that while the methods of treatment adopted may, because of the progress of the disease, prove of but temporary effect, the improvement noted in these cases might, in cases

less advanced, give hope of permanent relief.

For our purpose this evening I shall take the liberty of arbitrarily dividing the therapeutic methods adopted for consumption into the specific and the hygienic.

By the term specific I refer to remedies which are given for the purpose of producing an antitoxic or bactericidal effect. The *rationale* of the first seems to be that by neutralizing or destroying the toxins eliminated by the tubercle bacilli we enable the system to successfully combat the disease. For this purpose the products of the culture of tubercle bacilli are used, which, after being filtered, preserved in glycerine and concentrated, are known as tuberculin, first presented by Koch to the profession at Berlin in August, 1890. At first accepted with enthusiasm, it is now regarded by the profession in general with suspicion, although it still has its warm advocates. Tuberculin will destroy much, and sometimes all, of the ulceration of lupus, but tubercle bacilli are still found in the cicatricial tissue; it also has the power to destroy tubercle when it can be brought in contact with it, but much of the tubercular mass is inaccessible.

Solly, in the recently published treatise on therapeutics, says of tuberculin: "It is undoubtedly true that treatment with the early, crude tuberculin was dangerously destructive, generally carrying the disease beyond its original limits and increasing the ulcerative and suppurative processes; in the modified tuberculin the destructive element has been eliminated, and possibly the immunizing property maintained. It may be that the tuberculin has only been diluted into inertness, and that the favorable results obtained are simply those which would usually follow upon the general good care of as equally highly selected a class of cases as those which are now usually reserved for tubercular treatment."

Osler, in the "American System of Practical Medicine," writes: "So far as we know, there are no agents which have a special and peculiar action on the tuberculous processes. The chief

remedies employed against the disease influence the general nutrition, increase the normal physiological resistance, and perhaps render the tissues less liable to invasion."

Sidney Martin, in "Albutt's System of Medicine," recently published in England, when writing of tuberculin, says: "Its continued use leads to dissemination of the disease, so that whereas at first the disease may be limited to the lungs, after a course of tuberculin the patient may die with disseminated lesions in various organs of the body. The same observation has been made in cattle. Tuberculin, therefore, is a specific product of the bacillus, inasmuch as it has a specific action, namely, that of producing fever, and so acting on the local processes in tubercular individuals that the disease becomes disseminated."

On the other side, Professor Whitaker "has used tuberculin in over one thousand cases, and has never seen any kind of evil result beyond the characteristic reactions, while Koch declares the fear of danger to be a foolish prejudice; the continual use of the antitoxine seems, however, to finally fail in its effects."

From tuberculin we have made tuberculocidin, antiphthisin, oxytuberculin, etc., of which but little is known. Prudden and Hodenpyl have ascertained that the poisonous substance of a tubercle bacillus culture is not present in the nutrient media, but fixed in the bodies of the bacilli themselves in a very resistant form. The poison is not altered when within the body for a considerable while, so that persons infected cannot recover as soon as the bacilli are dead, but only after their expulsion, and the neutralization of any remaining poison. In conformity with the facts gained from similar investigations, Koch, in April of 1897, presented his tuberculin R., made by triturating the tubercle bacilli and subsequently centrifuging the product several times until the desired substance is obtained. Trudeau and Baldwin find that the manufacture of the tuberculin R. now on the market is imperfect, and that tubercle bacilli capable of producing tuberculosis by inoculation are present.

Among the serums obtained from the horse for the treatment of tuberculosis are the antitoxine of Paquin and the antiphthisic serum T. R. of Fisch.

The bactericidal specifics are supposed to exert their influence by increasing the white blood-corpuscles, which, according to the theory of Metchnikoff, act as phagocytes in destroying the micro-organisms. Among this class of remedies we have nuclein, which is the principal chemical constituent of the living parts of cells, and is two-fold in its functions: First, that of a tissue builder; and, second, it possesses the properties of an antitoxine. All proteids are converted into nuclein by the leucocytes. The nucleins are obtained from blood-corpuscles, casein, eggs, salmon sperm and yeast. Vaughan's experiments tend to show that nuclein derived from the polynuclear white cells is the germicidal constituent of the blood serum. Besides producing nuclein, the white blood corpuscles are supposed to exert a phagocytic action, engulfing and destroying the bacteria. Their ability to do so, however, seems to depend on the absence of the toxine of an organism which is pathogenic for the individual, for when a capillary tube, closed at one end, and containing a culture of non-pathogenic organisms is introduced under the skin, vast numbers of phagocytes enter the tube and in a short time have engulfed and destroyed the germs. If the tube contains a culture of a pathogenic germ, very virulent to the animal, no such process is noted, but, on the contrary, the phagocytes retreat from the tube. This function, therefore, known as chemiotaxis, is paralyzed by the toxine of a pathogen. I have used nuclein, administering it to eleven patients for periods varying from one to three months; the preparation employed was the 5 per cent. solution of nucleinic acid devised by Vaughan and McClintock, and manufactured by Parke, Davis & Company. I gave one and a half cubic centimeters daily, hypodermically, but must confess without obtaining more favorable results than were secured in other patients in the same physical conditions who did not receive this treatment.

Horbaczewski's experiments emphasize the relation of nucleins to leucocytosis and of the latter to the production of uric acid. By feeding nuclein to men and animals he demonstrated an increase in the uric acid eliminated. Since, also, after a meal rich in meat there is a temporary leucocytosis and a corresponding increase in uric acid, he believes that leucocytosis is produced by the nucleins of the food. We may therefore question the propriety of artificially increasing the number of leucocytes by medicines given for that object only, as we know that when a part is injured or irritated there is manifested increased vitality, indicated by a relatively large number of leucocytes. As the result of these various experiments and theories, one fact is made pre-eminent, *nutrition is the foundation of the reparative process*, and, with a given amount of nutritive pabulum, I cannot see how, in a chronic disease, by increasing the amount of leucocytes and—as we may reasonably surmise—proportionately diminishing their vigor, the results can be any better, if as good.

HYGIENIC TREATMENT.

Notwithstanding, therefore, the earnest efforts to discover a specific remedy for tuberculosis, success has not been attained, and we must rely upon the inherent disposition of the body to neutralize or destroy the poison.

To assist in the accomplishment of this object it is our province to increase the nutrition of the body to the highest attainable degree, and endeavor to remove all complications and secondary infections. For the accomplishment of this end the following are essentials: Pure air, free from dust or contaminating substances; appropriate clothing, bathing, judicious exercise, proper food, regular habits, and appropriate medication. Climatic treatment is practically open-air life, the essentials being pure air, absence of sudden changes of temperature, and sunshine.

The indispensable value of the open-air life is shown by the experiments of Trudeau, who successfully inoculated rabbits with bacillary matter. Some were allowed their freedom and others

confined. The former recovered, without any trace of the disease remaining, while all of the latter died. Unfortunately, these demonstrations on human beings are being continually made. Thus in thirty-eight cloisters in France, of 2,099 deaths, 1,320 were from tuberculosis, a percentage of 62.88. In the Alabama Insane Asylum 28 per cent. among the whites and 42 per cent. of the blacks succumbed. Of the persons confined to the prisons of Austria, 60 per cent. died from tuberculosis, while 15 per cent. of those living without perished from the same. Even in Colorado, with its favorable climatic influences, persons placed under unfavorable hygienic conditions succumb to pulmonary tuberculosis, as in Denver, in 1896, sixty-four unimported consumptives died of the disease.

Another necessary factor may well be mentioned here, the necessity of having the air passages of patients in a condition that will admit of free and uninterrupted breathing by the removal septal spurs, hypertrophied turbinated bodies, enlarge tonsils, etc., particularly the latter, as they are frequently the source whence the disease was communicated to the lungs. Sunlight is also of great benefit, not only by acting as a disinfectant, but also by promoting a healthy growth, stimulating the nervous system, increasing the metabolism of the body, as well as acting as a sedative.

The necessity of a proper selection of clothing, in which wool should be used where it is possible, bathing, and judicious exercise, is self-evident, and should receive careful and patient attention.

Of equal importance with pure air is the selection of proper food, and its digestion and assimilation, and, after placing our patient in the proper environment, our chief duty to him consists in promoting, by every means in our power, the nutrition of the body. The food selected should be rich in nitrogen; meats, therefore, should be the staple article of diet, not only because they are comparatively easy to digest, and possess relatively greater nutritive value, but also because investigations have

shown the saliva and pancreatic juices to possess but 50 per cent. of their normal digestive powers. In cases of uncomplicated pulmonary tuberculosis, without septic infection, patients, when placed in the proper environment, have good appetites, and are able to digest their food without difficulty, the quantities of fats, starches, and fruits it is deemed advisable to permit will, of course, depend upon the patient's inclinations and digestive abilities.

The advisability of giving fat in the form of cod-liver oil is still questioned. If kept within the oxygenating capacity of the system, so that a sufficient surplus of oxygen is left to completely oxidize the proteids, and the glucose in the liver, its administration is advisable; if an excessive amount is taken it is shown by a decrease in the amount of urea eliminated and an increase of uric acid, or perhaps oxalates, glucose, and even albumen may be present in the urine. All that can be derived from the rapid oxidation of fat is heat, and through it energy; but no constructive or reparative material is obtained. It is, therefore, not of sufficient value to be given if indigestion follows its administration.

Alcohol is another remedy still used in large quantities, which can be advantageously omitted, as its action seems to be attended with inconveniences, for which its food value is not a sufficient compensation. Its former administration in large quantities for the purpose of assisting in producing fibrosis is now admitted to be of no avail. Given in amounts not to exceed one ounce per diem, it is perhaps harmless, although the rapidity of its oxidation would lead us to suppose the same criticism might well be made of it as of cod-liver oil, viz., that its affinity for oxygen would result in deficient oxidation of the by-products of tissue metamorphosis. In larger amounts its use is to be condemned as positively injurious, as it forms with the hemoglobin of the red blood corpuscles a compound which takes up and parts with oxygen less readily than normal hemoglobin, thus leading to a general diminution of the metabolism of the body. It also exerts an inhibitory

action on the formation and functions of the leucocytes and other corpuscular elements of the blood and tissues, thus acting antagonistic to the processes considered essential to the recovery of the patient. So that it can be seen that, while at first it stimulates, as its effects pass off depression results, and the sum of the two phases is, to say the least, no better than if no alcohol had been given. Experience gained from long marches of troops and the employment of men upon the construction of railroads, etc., has shown that its use tends to diminish the total amount of work done. It enables a man to spurt, but not to stay. The elimination of alcohol by the lungs also increases the bronchial catarrh; the heart's action is weakened through fatty degeneration; the nervous system is benumbed, and numerous other functional and pathological conditions produced antagonistic to the well-being of the patient.

Of the medicinal agents usually employed, creasote alone seems to be regarded with favor, as it is supposed to act as an antiseptic and a stimulant to the digestive tract. Whether it is of benefit or not is a debatable question. I have employed it in a routine way, giving five minims every three hours to patients advanced in the disease. It is unpleasant and irritating to the stomach; the great majority can, however, take it without repugnance, and I feel it has a beneficial influence in lessening the cough, diminishing the expectoration, and increasing the general nutrition.

The ordinary iron, quinine and strychnia tonic is given after each meal, the latter ingredient being increased in the less advanced cases by an additional tablet of one-thirtieth of a grain. This is done to increase the strength of the heart's action, thus acting as a substitute for the alcohol usually given for that purpose. Strychnia is thought to exert a very favorable influence in the disease, and it is recommended in doses up to the physiological limit. It shows its effects by amelioration of the nervousness, sleeplessness, and pain in the chest, and by lessening the cough and expectoration, diminishing the dyspnea, as well as exerting a general tonic effect.

The fever is seldom high, except in advanced cases, when the septic infection exerts a preponderating influence. The excessive elevation of temperature seldom continues long, and may decline in the course of a few hours to the sub-normal. The high fever is frequently ushered in by a pronounced chill, and may occur at any time of the day. Sponge baths, and phenacetine in five-grain doses if deemed necessary, will usually reduce the temperature in a short time. Quinine in doses of ten grains, in cases that have the fever at certain periods of the day, exerts a beneficial influence, if exhibited five hours before the customary time for its appearance.

Cough is an exceedingly variable symptom, and, unless accompanied by expectoration, is useless and harassing to the patient. Bromide of potash in doses of ten grains every two hours will usually be found efficacious in controlling it. Besides, this dry, irritable, hacking cough found in nervous patients, the presence of cough is indicative of bronchial catarrh, either acute or chronic in character, and caused by organisms other than the tubercle bacilli; or it is due to bronchiectasis or tubercular ulceration of the bronchial mucous membrane. The relief of the accompanying bronchitis is, therefore, absolutely essential to the welfare of our patient, as no amelioration of his condition can be expected as long as severe coughing, attended with loss of sleep, vomiting, pain in the chest, and an irritable general condition, prevails. For its relief the general hygienic measures already mentioned play an important part. The method adopted at the hospital is to administer bromide of potassium in ten- or fifteen-grain doses every two hours. If this does not suffice codeia may be employed. This is seldom necessary, however, as relief is usually readily and promptly given by intra-tracheal injections. I have given these injections probably a thousand times during the past four months, and cannot speak too enthusiastically of their beneficial effects. Patients who have found no relief from opiates secure comfort, and quiet sleep supersedes the

former restless nights. The result is produced by removing the catarrhal condition of the bronchial tubes as well as by exerting a soothing and antiseptic influence. The following, with occasional variations to suit special indications, is used:

R Menthol	3.00
Camphoræ	2.00
Ol. Eucalypti	3.00
Gualacoli	0.5
Liq. Albolini	100.00

M. Of this combination about five drachms (20 c.c.) are given.

Besides this beneficial local action, we are also enabled to dispense with opium and its accompanying deleterious effects, such as loss of appetite, constipation, lethargy, etc.

If the methods of treatment already mentioned can be adopted, night-sweats will not require your attention, unless due to some complicating malady. Agaricin in doses of one-tenth grain is very efficient, and its use is not attended with the disagreeable effects which follow the administration of atropia.

The treatment of the various other complications attendant upon tuberculosis of the lungs I shall not mention this evening.

In conclusion, therefore, if I were to attempt to epitomize the treatment of pulmonary tuberculosis I would say: Secure fresh air and good food; abandon alcohol and opium.

[FOR DISCUSSION SEE P. 142.]

Ichthyol in Gastro-Intestinal Diseases.

Lange (*Allgemeine medizinische Central-Zeitung*) recommends a pill of one and a half grains of ichthyol every hour or two in all severe cases of acute intestinal catarrh, also in all cases of chronic catarrh of the rectum and hemorrhoids in which there is a great tendency to tympanites with foul evacuations. He states that this treatment is very efficacious, and he has never known it to give rise to anything worse than eructations.—*Clinical Journal*.

FORMALIN, 1:500 as a daily urethral douche, has proven valuable in the treatment of deep posterior urethritis.

THE TREATMENT OF PULMONARY TUBERCULOSIS WITH REMEDIES DERIVED FROM THE SPECIFIC GERM.¹

BY KARL VON RUCK, B.S., M.D.,
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The subject of bacterio-therapeutics in tuberculosis has again revived in interest with the introduction by Professor Koch of his new tuberculin, and since that time several new procedures have claimed attention with a view of immunization and cure of the disease. A careful reëxamination of the subject may therefore be proper at this time, that we may know what the newer remedies really are, what their therapeutic value promises to be, and what danger, if any, attend their use, and so that we may take their employment under intelligent consideration, and at the same time obtain a clear conception of their limitations. In undertaking this I hoped to be the better able to arrive at the truth, because of having followed both the experimental and the clinical side of the work, and having produced all the specific remedies which have thus far claimed the attention of the profession.

In giving you my experience I must necessarily leave out many interesting details in order to keep within my limit of time.

In the animal experiments, as well as in the production of remedies proposed by others, every source of error has been carefully guarded against, and to begin with I wish to call your attention to the results obtained in two series of experiments, in which two hundred animals were used with a view of determining the value of several of the remedies as such, and to show any possible superiority of one remedy over the other.

The second series was undertaken to confirm the results in the first, and the variations obtained were so slight that there was a full confirmation of the previous results in every respect.

¹ Read by invitation before the Academy of Medicine of Cincinnati, December 20, 1897.

All the animals were treated until a few days before death, under constant observation of temperature, weight and general condition, excepting Group "G," treated with watery extract of tubercle bacilli, to which I shall refer again.

With the exception of one animal in Group "G," which apparently recovered, all died of tuberculosis or from its effects, and in the post-mortem examinations more or less recent tubercles were found with nearly as great frequency in the treated animals as in those which served for control, but old fibroid changes were the more marked the longer the animals had survived infection.

For the claim of benefit derived, based upon prolongation of life only, well-marked differences are necessary, inasmuch as artificial tuberculosis in guinea-pigs is not so uniform in its fatal course, as has been frequently asserted, unless the infection is made intra-peritoneal and very large numbers of tubercle bacilli are introduced; animals so infected are overwhelmed by the infection, and die within thirty or forty days, giving not enough time or opportunity for treatment.

Subcutaneous infections with moderate, uniform quantities of tubercle bacilli were therefore employed. But animals so infected appear to vary in the degree of individual resistance, so that, regardless of every possible precaution, the disease pursued a more rapidly fatal course in some animals than it did in others.

The use of a larger number of animals, and a repetition of the experiments, were therefore deemed essential to prevent erroneous conclusions.

The following results were obtained:

Group A.—Control animals. Average duration of life after infection, 119 days; average loss of weight, 90 grammes.

Group B.—Treated with Paquin's serum. Average duration of life after infection, 100 days; average loss of weight, 110 grammes.

Group C.—Treated with Koch's tuberculin. Average duration of life after infection, 130 days; average loss of weight, 90 grammes.

Group D.—Treated with antiphthisin "Klebs." Average duration of life after infection, 141 days; average loss of weight, 70 grammes.

Group E.—Treated with glycerine extract of tubercle bacilli. Average duration of life after infection, 178 days; average loss of weight, 75 grammes.

Group F.—Treated with tuberculinum purificatum. Average duration of life after infection, 200 days; average loss of weight, 40 grammes.

Group G.—Treated with watery extract of tubercle bacilli. Average duration of life after infection, 240 days; average loss of weight, 40 grammes.

For further control two other groups of animals were treated, one group with nuclein and the other with a preparation made from the unplanted culture fluid, following all the steps in the preparation of antiphthisin, and giving all the tests claimed by Professor Klebs to be characteristic for antiphthisin.

Group H.—Treated with nuclein Vaughan. Average duration of life after infection, 102 days; average loss of weight, 42 grammes.

Group I.—Treated with imitation of antiphthisin. Average duration of life after infection, 133 days; average loss of weight, 110 grammes.

Minute post-mortem examinations, including microscopical examinations of sections from all diseased tissues found, were made and preserved in every instance.

I have studied these preparations repeatedly and most carefully, and while on the whole the treated animals, especially those which received purified tuberculin and extracts of tubercle bacilli, showed more frequently absence of tubercle bacilli than did the control animals, I would not consider this evidence strong enough to make any claim on this account for the remedies employed.

Of more import is Group "G," treated with watery extract of tubercle bacilli for definite periods of time, namely, a sub-group of four animals for 50 days, another of like number for 100 days, and still another, comprising two animals, for 150 days. All these animals survived their respective periods

of treatment. Those treated for 50 days lived for between 60 and 83 days thereafter; those treated 100 days lived 135, 144, 155 and 161 days respectively; and of those treated for 150 days, one lived 195 and the other 272 days after the treatment was suspended. The latter two animals lived longer than any of the others, and the one which died 195 days after the treatment was stopped, and 345 days after infection, died of suffocation through pressure upon the trachea of a greatly enlarged subternal gland, which proved caseous, and contained tubercle bacilli; several other tubercular glands were found, and fibroid nodules were also found in the lungs, liver and spleen, but the latter contained no tubercle bacilli; neither was there any eruption of recent tubercle.

The other animal did not die of tuberculosis. It was well and had gained in weight 150 grammes to within two days of its death, which the post-mortem examination showed to have been due to an incidental acute inflammatory affection. Fibroid nodules were found in the liver, spleen and lungs; several lumbar and mesenteric glands showed enlargement and fibroid changes, but a most searching examination of all these structures in numerous microscopical sections failed to demonstrate the presence of tubercle bacilli.

Implantations made in several animals with these tissues, now nearly two months ago, have so far caused no disturbance, the animals are free from fever and apparently well, and I am sure that you all will share with me in the hope that these implantations will eventually prove negative. If so, this will be the only animal in which an unquestionable cure has resulted in the many which have been experimented upon in my laboratory.

While not brilliant, my experimental results can still be considered as greatly encouraging, especially those obtained with the watery extract, which leave little room for doubt.

In my clinical work I have employed tuberculin, antiphthisin, purified tuberculin and watery extract, but have abstained from the use of tuberculin R: first, because of my satisfactory results

from purified tuberculin and from watery extract; and, second, because I found tuberculin R to contain fragments of tubercle bacilli, which I feared might be virulent.

To explain the justification of such fear I may remind you that this preparation, like the watery extract, is made from the living virulent germs, which, being removed from the culture fluid, are dried, powdered, and with the addition of distilled water their separation is sought to be accomplished by the centrifugal machine.

That this is not effectually accomplished has been confirmed by other experimenters besides myself, and Dr. Trudeau has even produced virulent infection with his preparation. The product is certainly not a solution of the germ, but rather an emulsion of fragments and some fat, which, however, also contains proteids in solution; and the only way that I should at this time be willing to employ the preparation would be after filtering it through porcelain. In doing this, however, I find that the amount of proteids in solution is so extremely small that a quantitative estimation is impossible.

The watery extract of tubercle bacilli as prepared by me is free from these objections, and differs in its preparation in so far from tuberculin R. that after washing and drying the germs I extract their fat with sulphuric ether, and find that after drying and powdering the extracted bacilli and macerating them in distilled water at a temperature of 112°F., their proteid substance enters readily into solution; and that by repeating the drying and powdering, from 80 to 90 per cent. of the weight of the germs (after being extracted with ether) can be obtained in a solution which readily passes through a porcelain filter. The filtered product is standardized to one-tenth of 1 per cent. of organic substance, and is preserved with glycerine.

My results in the animal experiments conducted with the greatest care, as well as the clinical data, to which I shall refer in another place, would indicate that the extraction of the germs with ether does not injure or destroy the proteids obtained, and therein lies the only

difference in the manufacture, beyond the substitution of filtering through porcelain for the centrifugal process. Neither can I find any authority in chemistry which would support the theory that sulphuric ether has any such effect.

Proceeding now to the consideration of the clinical value of the remedies which I have myself employed in pulmonary cases, this must for the present still remain largely a matter of opinion.

In cases which progress unfavorably and die, there can, of course, be no demonstration of curative effects in the human subject any more than in the animal experiment, and without exact knowledge of the actual duration of the disease, and the manifold complications which arise toward its close, there is not even an opportunity of showing that the remedies employed prolonged the life of the patient.

In cases which improve or make an apparent recovery it is equally impossible to say what the result would have been without such medication; and if in a certain period of one's practice more favorable results have been noted than in a previous one, it is still reasonable to attribute this to the fact that the clinical material was on the whole more favorable.

The elements of uncertainty can only be eliminated by years of patient and careful observation in a great number of patients, unless with a remedy capable of exerting a very decided and powerful influence toward a cure; but I venture to assert that, however specific in their action and prompt in effect, no remedy which is now available, or likely to become available in the near future, can influence the established pulmonary disease, so that after a few months of its use, or with the experience of a dozen or two of cases, a valid and a final judgment is possible.

When we propose to treat pulmonary tuberculosis with specific remedies, in the hope of removal, or aiding in the removal of the specific cause or of its effects, or both, the germs must be accessible to the remedy through the circulation, and the lesion must be such that the pathological tissue changes

have not progressed to a degree of degeneration or cellular death, from which a return to normal conditions is impossible, or the pathological new-formation must be of a character so that it can be absorbed.

We may admit access of the remedies under consideration to recent tubercle, or perhaps even to small caseous tubercle, and absorption of the latter may also be conceded; but cases as they present themselves for treatment are rarely, if ever, such that the foregoing is the sum total of the pathological changes present.

On the contrary, and in even what we call an early stage, and in the most favorable form, in which exudative inflammatory changes are absent, larger aggregates of tubercle and nodules are present, often with caseous centres, many times surrounded by fibroid tissues; at other times the caseous process has reached the stage of softening or excavation.

Scattered peripherally are smaller isolated tubercles of more recent origin, but they do not readily reveal their presence either through percussion or auscultation, and much practice is necessary to detect the more delicate physical changes in such infiltrated areas.

By far the greater number of patients present such advanced pathological changes in large portions of both lungs, and often we have exudative pneumonic processes, with extensive caseation, suppuration of cavities, and absorption of disintegrating organic substances, in addition to toxic products from other pathogenic germs.

Unless more or less of inflammatory changes or absorption of toxic products are present, patients in the early stage, with limited lung involvement, do not present symptoms to cause them to seek our advice; and when present the active symptoms frequently cease, and a period of improvement of various duration follows regardless of treatment—a fact which must account for the glowing reports made frequently for new remedies, the administrations of which happen to coincide with such a favorable change.

Apart from acute miliary tuberculosis, or from extensive eruption of new tubercle in the chronic course of the disease, the severer symptoms in the advancing stages are not produced by tubercle bacilli, or by tubercle removable with specific remedies, but are due to secondary changes in degenerated tubercle and in their vicinity, such as exudative pneumonias, retention and absorption of specific and non-specific toxic products incidental to suppuration from mixed infection, etc., which are all beyond our powers of removal with remedies directed solely against the specific cause.

If we observe their mitigation and disappearance under such remedies, we can at most credit them with a partial influence through removal of already formed tubercle, or prevention of new eruptions and extensions into previously intact tissues, thereby enabling the organism to more effectually resist and overcome the complications spoken of.

Bearing these natural limitations constantly in mind, I have carefully observed the course of the disease and its progress in more than 1,500 patients which I have treated with specific products during the last seven years; and repressing at all times the natural desire to credit favorable changes to the influence of such medication, I have sought to appreciate their relation in each individual case.

Under such a course I have never seen any cause for becoming greatly enthused, or to share the belief of some observers that the treatment of tuberculosis is solved, and though at times greatly encouraged, I have also had periods of serious doubt and uncertainty, and have never seen the time when I felt that such remedies were more than an aid in the treatment of cases of well-established pulmonary tuberculosis, such as come under my own care.

Neither have I felt that I could relax my efforts in the use and application of every other means which I had at my command; and seeing the shortcomings of all remedies, it has been my constant endeavor to also perfect the older means and methods which I applied and made use of, giving unremitting attention to

even the smallest details; and I am satisfied that this course, together with my increasing experience, has also a share in the bettering of my results.

Nevertheless, it is my conviction that the specific remedies used have been a material aid in the treatment of many of my patients, and I am the more ready to continue their use inasmuch as the results in my animal experiments have also improved with the progressive changes from crude tuberculin to antiphrthisin, purified tuberculin, and finally to the watery extract.

I have elsewhere reported my clinical results with tuberculin and antiphrthisin as additions to the usual methods of treatment. My report of cases treated with purified tuberculin is in preparation, and promises to be better than any made heretofore.

Confirmatory of my own opinion as to the aid these remedies have been in my clinical work, I have the opinions of several hundred colleagues who have applied them under my advice during several years past, and many of whom seem inclined to claim much more for them than I am willing to concede.

The results and conclusions based upon the use of antiphrthisin in the Charity Hospital of New Orleans, under the control of a commission appointed by the Parish Medical Society, are peculiarly interesting, inasmuch as the cases treated were mostly old inmates of the hospital, none of which were improving, and most of them losing ground before the treatment was begun; all cases improved under the simple substitution of antiphrthisin for creasote with the exception of two, and these were so far advanced that there was no reasonable ground for expecting any change for the better; several of the cases were pronounced as being practically cured after having been treated for ten weeks.

Before leaving the subject of clinical evidence I will briefly refer to my use of the watery extract heretofore spoken of, with which I have now an experience of six months in upward of twenty cases in various stages of the disease.

So far there are five cases free from symptoms, which include two

cases of moderate tubercular infiltrations in the larynx; four others are rapidly approaching such a result, and with the exception of two septic advanced cases, which received no apparent benefit, all others are progressing favorably. The laryngeal cases are, however, of special interest, since the tubercular process there is subject to inspection.

The two cases mentioned above and two others still under treatment showed local reactions in the larynx under larger doses of the remedy, consisting in increased tumefaction and secretions of the parts involved. These reactions continued from twenty-four hours to four or five days, and left a visible and unmistakable better appearance every time after their subsidence.

Several small ulcers have entirely healed; in two cases the infiltrations have disappeared, and in the most severe case the change has been the more remarkable, inasmuch as the patient had been under my care for nearly eighteen months without effecting any material change for the better, either of the ulceration upon the posterior wall or of the true cords and vocal bands, which presented enormous infiltration, the cords appearing in the mirror of the thickness of an ordinary lead pencil.

Curettement of the ulcers, lactic acid, iodine, nitrate of silver, etc., had all been carefully and painstakingly employed, with the result that the condition did not grow materially worse.

After the first local reaction all other treatment of the larynx was stopped, and about six or eight such reactions have since been induced at intervals of a week or ten days, and it is a source of much gratification to note the improvement which is now present.

The true cords are nearly normal in thickness, and are pearly-white when not reacting; the infiltration of the posterior wall is confined to the edges of the ulcer, which latter has every evidence of healing, and has greatly diminished in size.

In summarizing now the evidence of my own experience, under strict conservatism, I feel justified to claim a limited value (the degree of which is not yet

fully determined) for the remedies which I have employed. This value, however, is by no means such as would justify abandonment of any other valuable aid in the treatment of pulmonary tuberculosis.

The remedies used by me can be given with absolute safety, and, being now available with but a nominal expense to the patient, their use is not only justified, but desirable, in order to obtain a large series of cases, and the experience of a greater number of observers, with a view of a final and a more correct appreciation of the benefits they are capable of conferring.

[FOR DISCUSSION SEE P. 142.]

The Treatment of Vertigo Known as Meniere's Disease.

De La Tourette (*Semaine Médicale*, 1897, p. 301, No. 38) reports the case of a man fifty-eight years old. The patient, who had previously been quite well, was taken suddenly one morning in June, 1893, with a violent vertigo, having all the features of Meniere's disease. Following this the patient complained of a persistent noise in the right ear, and of a continuous vertigo for which he was given quinine in large doses with excellent results. Apropos of this case, the author takes up the history, causation, lesions and diagnosis of Meniere's disease. He points out the rôle played by hyperexcitability of the labyrinth in the production of vertigo, and dilates on the efficacy of quinine in the treatment of the auricular forms of vertigo. The medicament should be given in ten-grain doses once or twice a day for a period of at least a fortnight. —*Post-Graduate*.

Cured Ozena.

H. Burger (*Monatschrift f. Ohrenheilkunde*) reported a case to the Dutch Society for Diseases of the Nose and Throat of cured ozena. Child, aged fourteen, long treated without benefit. Burger, every second, third or fourth day, strongly massaged the nose with menthol oil. In four months all scabbing and secretion ceased and treatment was discontinued. —*Post-Graduate*.

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of December 20, 1897.

The President, W. E. KIELY, M.D.,
in the Chair.

W. EDWARDS SCHENCK, M.D., Secretary.

Tuberculosis—Specimens.

DR. B. F. LYLE: I have a few specimens here which I think will be of interest to the members of the Academy in connection with the papers to be considered to-night. Those I shall first present to you were taken from a young colored girl, fourteen years of age, who came to the hospital with a history of having been sick but two months. After remaining in the hospital three weeks, she suddenly died from the effects of a profuse hemorrhage. The nurses estimated the amount of blood lost at one gallon. Post-mortem examination showed slight pleuritic adhesions on both sides. The right lung was filled with disseminated tubercular deposits; the left lung, which I present this evening, is wholly consolidated, except a very large cavity is found extending from the apex to near the middle of the lungs. The ulceration includes all of the larger bronchial tubes at the root of the lungs. The ulceration and final rupture of one of the large vessels entering the lung was the cause of the profuse and fatal hemorrhage. More interesting than the lung, however, is this mass of bronchial glands, which weighs ten ounces, and is five inches in length and its antero-posterior and lateral diameters are each three inches. Within it is found the entire arch of the aorta, giving off its branches, which penetrate through about one and a half inches of the mass. It also surrounds the trachea, and the esophagus is attached to its posterior surface. The surface of the spleen is almost entirely studded with large tubercular nodules, which extend half-way to the centre of the organ.

The pancreas itself is rarely affected with tuberculosis, but the lymphatic glands adherent to the organ are frequently involved; this condition we have here. The left kidney and the liver also present a few caseous tubercular masses. The mesenteric glands were largely involved in this case. The enlarged bronchial glands were doubtless the original seat of the lesion, which invaded the lungs by passing into the root and ultimately extending to the remainder of the lung centrifugally and by aspiration. The condition of the spleen, liver and kidneys indicates that the virus was transmitted by the blood-vessels.

This larynx, taken from a man aged thirty-five years, who had been sick for two years, shows extensive ulceration of the epiglottis and aryteno-epiglottidean folds, and the true and false vocal cords.

This heart shows extensive pericardial adhesions, evidently of long duration, if we can judge by the length of the uniting bands and the apparent freedom of the pericardial surfaces of all indication of inflammation.

This piece of lung is of interest because of the extensive ulceration of the border of the lung, and because of the absence of the pneumothorax we would expect.

The extensive and firm organized pleuritic adhesion which characterizes this specimen I thought would be of interest, while the numerous cavities seen in this specimen of the lung is interesting.

These are enlarged mesenteric glands, and this honeycombed specimen of liver shows the mischief of secondary infections in tuberculosis.

Intra-Ligamentous Ovarian Tumor.

DR. RUFUS B. HALL presented a specimen of an intra-ligamentous ovarian tumor about twice the size of an adult head. More than half the tumor was dissected out of the broad ligament. On the opposite side was a suppurating ovary the size of a small cocoanut, filled with very offensive pus. The specimen consisted of the suppurating ovary, the intra-ligamentous cyst

and the uterus. The tumor was presented in the fresh state, having been removed the same day. The method of cutting off the blood-supply before commencing enucleation was a modification of the technique suggested some weeks ago when the doctor presented a similar tumor. He emphasized the advantages to be derived by following this method in these cases. This case was much complicated on account of the suppurating ovary. On this account it was impracticable to follow the method in detail. In this instance, after ligating the ovarian arteries, he was compelled to first separate the bladder and push it down in front and then ligate both uterine arteries before commencing enucleation. The field of operation was fouled with pus from the suppurating ovary. This induced the doctor to make total extirpation of the uterus and drain through the vagina.

DR. B. F. LYLE read a paper entitled

What Treatment Shall We Adopt for Pulmonary Tuberculosis
(see p. 127).

By invitation, a paper by DR. KARL VON RUCK was read entitled

The Treatment of Pulmonary Tuberculosis by Remedies Derived from the Specific Germ (see p. 135).

DISCUSSION.

DR. E. W. MITCHELL: The papers that have been presented are admirable, especially that of Dr. Lyle's, which is a perfect clinical report. The results as reported are encouraging, and demonstrate the wisdom of the trustees in transferring these cases to the Branch Hospital, for there never were more discouraging cases than these when they were in the wards of the Cincinnati Hospital. The two papers together are a good summary of the times. At least we are at a more hopeful period than formerly, and the profession at large look upon these cases with a greater degree of hope than a few years previous. Hopefulness from treatment depends upon an early diagnosis, but I do not believe that tuberculin is used often enough for diagnostic purposes. The accidents that Dr. Lyle speaks of

occurred before we had the purified tuberculin.

I have used nuclein in a few cases, and in some there seemed to be improvement, but, in addition to the remedy, hygiene was considered, and they received a good nitrogenous diet, which, of course, was of great value, and especially that of the fresh-air treatment. Those cases that cannot go away, you can at least improve their surroundings. Among the poor you must at least impress upon them that they cannot take cold, and that they should have the window of their sleeping apartment open, properly and warmly clothed, and should live in the open air and avoid drafts, and you will get important results. The greatest importance is hygiene. In conversation with Dr. von Ruck recently upon nuclein he said that he noticed an increase of weight under its use, but it did not seem to influence the disease. Dr. Lyle's reasoning will probably prove correct, that there will be no direct benefit from this agent. For a long time I have given creosote as a routine treatment in this disease, but am not in a position to speak of its value, though in one case in particular that had temperature, hemorrhage and infiltration of the left lung, which was on nuclein without effect, but when put upon creosote there was marked improvement, which continued for a year, but at the end of that time the disease again progressed to a severe hemorrhage from which he died; this case received thirty-five drops of creosote after meals, but few cases can take large doses of this drug, the usual dose ranging from five to ten drops. I do not believe that the drug is a germicide, but stimulates the digestion and prevents decomposition in the alimentary tract and the absorption of resultant material. It has decided action upon bronchitis, and I think another benefit is due to modifying the bronchial catarrh of these cases.

IN eczema intertrigo or eczema of chafing a solution of nitrate of silver, three to forty grains to the ounce, is almost a specific.—*Med. Age.*

THE
Cincinnati Lancet-Clinic.


A Weekly Journal of Medicine and Surgery.

ISSUED EVERY SATURDAY.

J. C. CULBERTSON, M.D.,
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DR. J. C. CULBERTSON,
317 W. SEVENTH ST., CINCINNATI, O.

CINCINNATI, FEBRUARY 5, 1898.

Editorial.

SOME STARTLING FIGURES.

The recently issued annual report of the New York State Boards of Charities announces that "one-half of the inhabitants of New York City are now receiving practically free medical treatment." One of the recently caught in a free dispensary seeking a free prescription was Mrs. Hetty Green, the so-called richest woman in America. Hetty is rich, no doubt about that, but just all the same believes in practical economy. To attain her end she clad herself in a pauper's garb and made application for relief. While in the dispensary she was recognized by a visitor and her identity made known to the prescribing physician.

The report says further:

In the Borough of Manhattan there are sixty-six or more dispensaries, and from fifty-seven of these the Board has received reports for the past year. These reports show 1,043,428 cases treated and 1,674,280 prescriptions furnished, an average of 18,305 cases and 29,373 prescriptions to each dispensary. Making use of these same averages for the nine dispensaries whose reports are not yet filed, indicates the treatment of 1,208,173 cases, and the furnishing of 1,938,637 prescriptions in this single borough during the period of one year.

These statistics by no means cover the volume of medical and surgical relief dispensed to out-door patients in this borough, for there are many other sources of assistance of this nature.

Fortunately in no other part of the State is there any such like abuse in dispensing medical charity.

That this is a wrongful state of affairs and produces an unfair competition with physicians, who, unlike the dispensaries, are not partially supported by charitable donations, admits of no question. That it is extremely pauperizing in its tendencies is equally true.

These are in brief the conditions which prevail, and to remedy which the medical societies are, in the opinion of this Board, fully justified in asking for remedial legislation.

It is not likely that legislation will ever entirely do away with the evils which are complained of, but it is probable that the enforcement through competent legal authority of a few simple requirements would have the effect of greatly reducing such evils and of satisfying the reasonable minded who now complain of them, without, in any sense, withdrawing appropriate help from the needy.

This is a pretty bad showing for New York, but similar conditions exist here and in other cities. There is a premium offered for non-support of the independence of the individual, which lowers men and women in their own self-respect. Then, again, physicians and pharmacists are brought almost to a condition of walking on their uppers through this indiscriminate giving away of their living through the guise of charity.

Think of the Hetty Greens in every city, and they do exist, and they exist through an education of the people in the hospital idea and dispensary habit!

Medical men will have a hard time to stop and turn the current in an opposite direction, and hard mainly because there are individuals in every city who do not want the turn to come. These people are well known. It is the general profession, the general practitioners, who are suffering, who must exhibit enough life and get up to go to the front for relief. The profession of New York is wide awake and in the field in a war for their rights, which

means a right to live and breathe through their own professional labors.

PUZZLED DOCTORS.

This is a frequent heading seen in the newspapers, after which there is a telling of something of the simplest nature, which any first-course medical student should be able to diagnosticate off-hand, or of a condition about as improbable and impossible as the laying of connection tracks on a line of railway between the earth and moon. Such reading is filling, to say the least. It bulges the revenues of the space-writer, and makes a corner on Providence. To be sure, the doctor in attendance was puzzled. Only the reporter failed to get a squint at the enigma, which is usually located in such cases in the vicinity of a nerve ganglion of peculiar sensitiveness located in most instances immediately over and covering closely the inguinal region. To touch this ganglion, in many instances, produces spasmodic convulsions varying in degree of severity in accordance with the sublimity of temperament of the patient. To introduce an aspirator, trocar or exploring needle so as to abstract the contents of the ganglion requires an amount of dexterity that differentiates between the skill of a Surgeon-General and a country blacksmith. Much of the fame of distinguished surgeons depends as largely upon their differential diagnosis in the ailments of this ganglion as in their treatment of physical ailments located in other parts of individual anatomies. This sensitive ganglion requires study. The size, shape, location, integumentary covering and contents—every item—must have consideration before puncture. Environment, social life and official position are elements of significance. To solve the puzzle by a free opening

and consequent flow of contents, thereby relieving congestion, is evidence of highest attainments in an operator's repertoire.

The puzzle is an unsolved enigma to an innocent pusher of Faber's No. 2. He sees or thinks he sees clear through it, but never a bit. The thimble-riggers' wee bits of sponge balls deftly moved from one covering to another is coarse and clumsy by comparison.

Puzzled! Well, the doctor may give out such an appearance or indication. That is the simplest part of the scheme, but is as much of a necessity as the orchestra prelude to a farce, comedy or tragedy. The reporter may be puzzled, but not the doctor over a swollen pocket-nerve ganglion.

DR. THEOPHILUS PARVIN.

The telegraph announces the death, on January 31, of this beloved master in the medical profession.

Dr. Parvin was born in Buenos Ayres, South America, January 9, 1829, his parents being residents of Cumberland County, N. J. He graduated at the State University of Indiana in 1847, studied medicine and graduated at the University of Pennsylvania in 1852, and located at once in Indianapolis. He was Professor of Obstetrics in the Medical College of Ohio from 1864 to 1869, then in the Medical Department of the University of Louisville from 1869 to 1872, at which time he was elected to a chair in the College of Physicians and Surgeons of Indiana. Soon after he was elected Professor of Obstetrics in Jefferson Medical College, Philadelphia, a chair held by him until his demise.

Dr. Parvin received many honors from the medical profession, all of which were worthily bestowed. He

exemplified the highest type of the cultured and courteous physician. To know him was to at once admire and claim his personal friendship.

Dr. Parvin was not only identified with medical teaching, but did much writing that was of a high order, at one time editing the Cincinnati *Journal of Medicine*. He was the author of many articles in current medical literature, and of a work on obstetrics.

The writer sorrows at the loss of a beloved friend.

MUCO-SOLVENT.

The following correspondence, with clipping, may be worthy of some attention from the Academy of Medicine in the discussion next Monday evening:

Editor LANCET-CLINIC:

I find, looking over a paper published in Cummins ville, called the *Transcript*, a little clipping of a new and wonderful discovery. I thought it looked so wonderful it would be a good idea if you would let the brethren of the profession know of the discovery. Thought I was very successful with antitoxine, but I find we are not in with "Muco-Solvent."

I had a case of follicular tonsillitis a few days ago, and the mother of the sick child almost insisted on me using muco-solvent the first evening, as the child was rather sick.

Can we do nothing with such quackery? Cannot such newspaper advertisements be stopped? This did not come out of the advertisement part, but was in the editorial columns.

I remain, yours,

X.

A preventive and cure for diphtheria, croup, tonsillitis, quinsy and all throat troubles recently placed upon the market has achieved such marvelous success as to greatly stir up the medical fraternity. Its power over diphtheria seems almost miraculous, as it stops its spread as if by magic.

Grantsburg, Wisconsin, population less than four hundred, was visited by a terrible epidemic of diphtheria, during which fifty-three of its inhabitants died in less than four weeks. After much urging by the friends of muco-solvent, the authorities decided to use it, and thereupon telegraphed for a large supply, which arrived the next day at 4 o'clock, and by 6 o'clock every man, woman and child in

Grantsburg were taking muco-solvent, with the result that not another death occurred, whereas, up to the very hour its use was commenced, not a day for two weeks had passed without from one to five deaths. Many other epidemics have been quickly stamped out by muco-solvent, notably at Madison, Polar, Winneconne and Neenah, Wisconsin.

We earnestly advise every mother to procure muco-solvent and keep it in the house ready for prompt use for every ill, however slight, especially if accompanied with sore throat, cough or cold, and thus, in many instances, prevent diphtheria or some other serious ailment the presence of which is not even suspected. Pleasant to take. It can be procured by sending the price (\$1.00 per bottle) to the Muco-Solvent Company, 356 Dearborn Street, Chicago, upon receipt of which they will send it, charges prepaid.

They will upon application, send free a book of forty pages entitled "Chats with Mothers," which every mother should read. They desire agents and the right person (woman preferred) can secure exclusive agency in their town.—*Chicago Opinion*.

At the Cincinnati Academy of Medicine, February 7, Dr. C. A. L. Reed will present a report on the workings of the Ohio State medical law, with suggestions relative to amendments.

Academy of Medicine of Cincinnati.

TELEPHONE 1981.

February 7: Demonstration of new intubation instruments, by Dr. Max Thorner; "Typhoid Fever: The Value of the Blood-Test," Dr. G. E. Malsbary.

A DOCTOR wishing to change his location would like to hear from some other medical man who would like to sell out. Address Box 652, Maysville, Ky.

\$100 REWARD.—This Company will pay a reward of \$100 on being furnished evidence sufficient to prove the fact of an authorized dispenser of medicines filling a prescription with other than Phillips' preparation, when Phillips' is specified.—The CHAS H. PHILLIPS CHEMICAL Co., 77 Pine Street, New York.

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Translations.

NOTES FROM THE HISTORY OF MEDICINE

FROM THE WORKS OF DE BORDEU.

TRANSLATED BY T. C. MINOR, M.D.,
CINCINNATI.

SECTION V.

Reform of Medicine at Rome—Archagatus Deplores it—Asclepiades Subjugated Minds; he was Made for that Work.

Rome became the sovereign of the world, and soon felt the want of other physicians than empirics, the modest and unknown practitioners dwelling therein. Virtue, sobriety, activity, a contempt of life and a love of country, to the exclusion of all other passions, had taken the place of the physician; above all, there were no great reasoners nor theorists at Rome; they did not hold the rank befitting them in a city full of soldiers and laborers, who were also orators and priests. The latter had been unable to feel, in the midst of candor and Roman simplicity, the resources of medicine in controlling the people; the Egyptians knew all this.

Cato believed that he foresaw that luxury drew thither the Greek physicians; it was against these rivals and enemies of empirics, from all times necessary to Rome, that Cato showed his bad humor. He wrote his son to defy these barbarians. The advice was too hard, although given with the best intention; besides, Cato deemed himself a physician. Meantime public vices gained headway, and diseases in proportion; the citizens increased in number, morals changed; the Romans soon learned that the Greeks, who had furnished them the laws, could also furnish them doctors; they were a necessity. The first foreigners who settled in Rome were really empirics, such as Archagatus; those of this sect had many analogies with the native Roman empirics. Rome, at the epoch of which we speak, was less in a condition to have physicians with sublime and ele-

vated dogmas than would be small provincial villages at the present day to listen and admire great poets and painters. Even at Paris it was necessary to have venders of Orvietan! Those who did not feel this necessity gave a proof by their narrow-minded views. Archagatus and his ilk were displeased by their unusual and unfortunate undertaking; he cried out against them; this outcry was, in reality, fomented by the natural empirics of Rome, who easily found the occasion to make war on medical novelties; they appealed without doubt from the decision of Cato, those often who raved the most really having very good principles.

Asclepiades appeared; the Senate was forced to recognize his virtues and great genius; he could impose silence on the clamoring and underhand plotting of the enemies and rivals of Archagatus and other foreign physicians. Asclepiades created a system of medicine; he made one, so speak, clad in romance.

The pride of the conquerors of the earth suffered impatiently that these petty Greeks should treat their Senators, their women, their children, as well as their following.

This new system confounded all the sects of Greek medicine; this mixture of Asclepiades' doctrines was most agreeable, most decided, and carried away the whole world like Hippocrates did. The universe submitted to the Romans and adopted their system of medicine with the same awe that provinces evidence for all that comes from the court and the capital cities of the world.

Greece, that, after Egypt, was the cradle of the art, was dazzled by the reputation of Roman medicine; it would have even invaded the name of Hippocrates if the name had not been one borne in Greece by a medical family of grand reputation.

Asclepiades found means to make himself admired by sending to the Greeks and all the inhabitants of the known globe their own special dogmas, adapted to his brilliant methods, like those able physicians who learned to collect the sun's rays with a hand-glass and thus

making them brighter and more intense than the sun itself. He astonished the earth; he owed much to the happy post at which fortune had placed him; he eclipsed the reputation of all his predecessors; he was truly great, truly the creator of a system in fashion. He has been compared to Boerhaave, and the author of this parallel appeared to lean towards the Roman reformer.

Meantime empiricism arose from its ashes; it did not cease to continue its progress in the heads of the common masses of people. Although they all admired the sublime dogmas of Asclepiades, he had on his side the sect following the philosophy of Epicurus and Leucippus. His disciples were very numerous; they made Rome a medical centre; they divided the empire their master had conquered. But some could not succeed with all this good fortune; they were forced to yield to the public, more or less attached to empiricism, that has deep roots in the heart of mankind.

These Asclepiadians took a middle part between the empirics and dogmatists; they were named Methodists, and by this denomination they passed the empirics, a little sharpened by some of the great principles of the dogmatics.

Themison, Thessalus, Soranus, all celebrated men, were chiefs in this mixed sect as well, as they were intelligent, and their ideas come down to us little changed.

Some time after Asclepiades, Celsus, a Roman citizen, taught physicians to treat of their dogmas in Latin; this was a happy epoch for medicine; it could never gain when treated in the vulgar tongues, as we have commenced to do in our present age. France already knew its Celsus, and its posterity knew his elegant manner of writing, and strove in every way to imitate his beautiful style.

Celsus introduced in his works empirics disputing against dogmatists; this proves that there were still disputes in both parties, which had not been able to secure unity, or were reanimated when Asclepiades was no more. Celsus developed the two systems, and appeared to lean towards the first. These doubts

on this species of balancing of authority between the sects that had sought to destroy each other lasted up to the time of Galen.

SECTION VI.

The Theriacum, the Chief Work of Empiricism.

It was at this epoch the chief discovered remedy of empiricism developed—*theriacum*. Up to the present day certain physicians use some of its known preparations. Androma Andromachus, physician to Nero, made an enormous decoction of all sorts of drugs. We know not what medical genius induced him to manufacture this mixture. It was not the method, for he knew enough to fear ridicule for the mixture he made, but he did not know enough to deter him from his enterprise. He *combined all the formulæ of the empirics*; he manufactured a monstrous remedy, that is still used, and that will be used, probably, until the end of time, a remedy that will always be dangerous to reasoners, one that can never be banished; it is, so to speak, the craving of the heart, the craving of the instinct, and according to the taste of all men.

It seems that *theriacum*, which is made essentially of spirituous liquors, and which can be supplied in part, only by wine and its preparations, should contain all the eminent virtues necessary in the distresses and symptoms of every disease; it consoles nature; it cures all cases of languor, weakness and sadness; it awakens the functions of the stomach, always dormant in diseases; it excites in the body a tumult of necessary intoxications that are needed to vanquish the derangements of the important viscera, which are, as so many regard, the very centre of life, health, of the exercise of all the functions. It succeeds in a thousand cases that seem opposed, because it has a thousand favorable sides for health; it unites, so to speak, all possible tastes of all possible stomachs.

We feel sorry for the theory and for the physicians of all other than the empirical sect. They can attack it as much as they will; they may prove that this composition has no common sense in it,

following the rules of correct pharmacy. Yet the popular language of all ages is stronger than the most beautiful of medical dissertations. Andromachus made a *chef d'œuvre* necessary for the human species, and none the less useful to animals, when he imagined and collected the materials for his wonderful theriacum.

This Andromachus would have been scoffed out of sight at the present day if he had tried to answer the objection of the theory on which his theriacum was based; he could not have obtained a degree from any modern medical school; yet, as we said before, his ancient remedy is still in vogue in some portions of the world. We have seen the time—not many years ago, either—when all the patients at the hospital of Montpellier were given a bolus of theriacum each evening, no matter what their malady might be. Yet the Faculty of Paris, meanwhile, thundered its invectives against this ridiculous composition.

We have seen theriacum administered, even in very large doses, in all kinds of indispositions, in all kinds of families, by old people of experience; and, strange to say, we have seen it succeed in many instances where we were uncertain what to do in following indications to be derived from principles of theory. What a fashion it once was in Paris! Prescriptions were only disseminators of theriacum, or more or less active cordials. How many efforts have been made, even by those who abused these formulæ, to imitate them!

We know a physician who tried to prove one day that they no longer employed, for ten years past, such a thing as hot drugs at Paris, as had been employed during the thirty previous years; yet their employment is made by the the very ones who decry those who started this medical fashion—a custom our grandfathers made use of as hot remedies—that is to say, theriacum—wine and raisins being dissolved therein.

All the voluminous treatises on pure water, the great number of cures attributed to it, the immoderate use of it that has been made at times, have not been sufficient to turn the instinct of

distressed humanity from its inclination for cordials and drugs that reanimate life and that aid in supporting its burdens. If the sick are accustomed to fear heating remedies and run after those that refresh; if the history of the circulation and scholarly theories on inflammation have taught the world to know congestion and gangrene, engorgements, suppuration, and all about the blood-vessels, it is necessary to agree it is only prejudice that separates these fears. It is often necessary to give remedies that will aid our patients to live, drugs that give strength, that move needful passions in different states in which man may find himself.

It is the duty of medicine to find these remedies. Water that refreshes, diet that weakens, are at the hands of all the world. Theriacum and its diminutives, wines in different combination, awaken activity and sustain life in place of weakening it. It is likewise true that, on some occasions, the true cordials are aqueous or relaxing remedies, as, for instance, in the case of acute diseases.

It is astonishing that modern medicine has not tried to compose a universal remedy for acute maladies by making an admixture or collection of all varieties of soft and pulpy fruits. A non-fermented mixture of this kind might constitute a theriacum for acute affections of short duration. If the latter were treated by a hand as happy as that of Andromachus one might do away with all the electuaries and syrups, that are, after all, only diminutives of that theriacum for which all manner of possibilities were conceivable. With such a remedy, and the ancient theriacum, medicine might take a long step in advance. A marmalade of cassia, an oil of manna, renewed in our day, has served as a base for a large number of Parisian syrups, the majority of which have no virtues. This only makes the public love them all the more, since they generally use pure sugar. Wine wheys go to take the place of decoctions, and the use of vegetables drives out extracts and electuaries; now the use of wheys, the pulp of fruits, cooked and raw, the same as extracts, have become the fashion among

the common people. Their first trials were made by those who worked for their daily bread, at the ripening of the fruits and the gathering of fresh vegetables. It is from these store-houses, open to all the world, that the public has derived its empirics, and that medical theorists afterwards built up their reasoning.

[TO BE CONTINUED.]

Operation for Fistula.

Henderson gives his plan for avoiding transverse section of the anal sphincters in operation for fistula. He makes a long incision in the line of the muscular fibres, and splits the muscle sufficiently to allow the fistula to be dissected out. In complicated cases with multiple fistula he cuts the sphincter attachments at the coccyx, thus giving room for getting behind the sphincter and dissecting out multiple fistula tracts, without making trans-section of muscle. — *Mathews' Med. Quarterly*.

NITRATE of silver stains can be removed by rubbing with a cloth wet in one part each of corrosive sublimate and ammonium chloride to eight parts of water.

THE statistics of the importation of champagne into the United States in 1897 speak volumes. To a certain extent they reflect the general state of business, and if the total number of cases does not come up to the 1896 figures it is largely due to the fact that, with a few exceptions, all branches of trade suffered from the hard times.

There are about thirty different brands imported, among which only about a dozen are well known, and the number of cases average from less than one hundred to over seventy thousand. If any brand deserves special mention it is G. H. Mumm & Co.'s Extra Dry, of which 72,775 cases were brought to this country in 1897. This is 42,292 cases more than of any other brand, and equal to one-third of the entire champagne importation. This brand has held its immense lead over all others for a number of years, a fact that is undoubtedly due to its remarkable quality, natural dryness and purity. These qualities have been brought to the attention of the medical profession by physicians of international reputation, and it is therefore only a natural consequence that G. H. Mumm's Extra Dry is prescribed in the sick-room in preference to all other brands.

Bibliography.

THE APHASIAS AND THEIR MEDICO-LEGAL RELATIONS.

By F. W. LANGDON, M.D., Cincinnati.

A few weeks ago the LANCET-CLINIC printed a very complete paper by a local writer on "The Histological Basis of the Neuron Theory," which has excited much favorable comment. Along the same neurological path, Dr. Langdon has led us to the aphasias. After a short account of the anatomical connection of the various centres involved in the production of correct speech, the limits of legal impairment are discussed under various headings. The aphasias themselves are taken up in three divisions—reception (or "sensory"), intermediate (or "conduction"), emissive (or "motor")—each of which is again variously subdivided, giving us a grand total of twenty-eight varieties of aphasia. The difficulties in diagnosing these different affections may well be imagined when, in addition to these, combinations may exist depending upon the amount of brain destruction. "Hysterical aphasia" has also been given recognition. As far as has been possible, cases have been described illustrating the types, for the most part from the doctor's case-book, greatly assisting in a more complete understanding of the text. The writer of this notice well remembers the great interest centered in the case of "Jackson Butler;" the annoyance of this great, good-natured creature that he was unable to tell his own name; his manifest delight when asked if his name were Jackson Butler. He repeated his new-found name over and over again as if afraid he would lose it. The paper concludes with an *à priori* statement as to the value of a legal document directed by aphasics, in case insanity can be excluded.

M. A. B.

OUTLINES OF RURAL HYGIENE.

By HARVEY B. BASHORE, M.D., Inspector for the State Board of Health of Pennsylvania. The F. A. Davis Co., Publishers, 1897.

The reasons of small local country

epidemics, especially of typhoid fever, are ingeniously explained, and methods suggested for building wells and cisterns, instituting drainage, disposing of waste products, erecting dwellings, which, if acted upon, would soon drive the country practitioner to himself become a tiller of the soil. The book is exceedingly interesting from a scientific point of view, but, according to our present health regulations, hardly practicable. A farmer would be no more apt to listen to a doctor telling where to dig his well than the doctor would consult the farmer as to the present status of the malarial organism. We should think that such a book would be of more interest to sanitarians than to physicians. There is appended an article on "The Normal Distribution of Chlorine," by Prof. H. E. Smith, of Yale.

MARK A. BROWN.

DR. W. H. GRAYSON, Surgeon to St. Mark's Railroad Hospital, Venice, Ills., says: "I have used Campho-Phénique in all sorts of

surgical procedures, and believe it to be the best antiseptic known. I find it non-irritating, non-poisonous and highly germicidal. It corrects offensive odors and facilitates healing. In a word, Campho-Phénique is the only antiseptic agent I am acquainted with that possesses all the good qualities without any of the bad. It is the remedy *par excellence* in erysipelatous affections."

ROSENTHAL, EDWIN: "The Use of Antitoxin in Laryngeal Diphtheria" (*Virginia Semi-Monthly*, 1897, Vol. II, No. 7).

The author reports the number of cases treated during the year preceding the writing of the paper. There were 48 of these cases, of which 7 died; mortality, 14½ per cent. Of these, 25 were not intubated, 1 died; mortality, 4 per cent.; 23 were intubated, of which 6 died; mortality 26 per cent. The latter mortality rate is similar to that shown by the collective investigations. Most of these cases were seen in consultation, and the author was only called when intubation was urgently required, which explains why the proportion of operative cases is so large. Twenty-seven cases were under three years of age. The time of wearing the tube varied between 27 and 575 hours, the average time being 128¼ hours. Mulford's concentrated antitoxin was used in all the cases.

Pneumonia Following La Grippe.

BY M. E. CHARTIER,

Docteur en Médecine de la Faculté de Médecine de Paris, Membre Correspondant étranger de la Grande Encyclopédie, Section de Philologie.

As a rule certain diseases prove more fatal, not only in given districts, but during certain periods of time, along particular areas of territory. We have La Grippe, decreasing in intensity for the present; it has been replaced by pneumonia, which is not only raging in the United States, but in European countries. The bacteriologists will have to explain this fact; the truth remains however, that the mortality from pneumonia in its various forms is now far in excess of any previous record.

Twenty years ago, and preceding the re-appearance of La Grippe in its epidemic form, pneumonia proved as dangerous as it does at the present time. Many cases fell under my personal observation, and I must admit that my Parisian confreres were at a loss, not for a remedy for the disease alone, but even for a logical line of treatment. Dujardin-Beaumetz became so skeptical that he prescribed stimulants, regardless of therapeutical conditions. The mortality in his ward at the Hotel Dieu proved that his patients fared no worse than the others submitted to the antiphlogistic remedies then en vogue.

At that time, I advocated in my treatise on therapy, the administration of sulphate of codeine in two to five centigrammes doses—one-

fourth to one-half grain. Codeine is the only remedy known to me possessing a marked and distinct effect upon the hypersecretions of the bronchial mucous membrane. What I then wished was an analgesic possessing antipyretic properties, which I could safely use. This I have since found in antikamnia and I believe it can be exhibited safely, especially on account of its not having a depressing effect on the cardiac system.

Experimental doses of from one-half to one gramme—seven to fifteen grains—of antikamnia administered under ordinary conditions did not develop any untoward after-effect. The following trace, taken with the sphygmograph was made ten minutes after the administration of one gramme—fifteen grains—of antikamnia.



Pulse, 112. Temp., 101 1-5 Fahr.

The above trace shows plainly that unlike other coal-tar products, antikamnia has a stimulating effect upon the circulation. In this particular case the temperature was sensibly reduced—102° to 101 1-5°. The analgesic effect of the drug was satisfactory.

My conclusion is that in the treatment of pneumonia, antikamnia is indicated as a necessary adjunct to codeine, on account of its analgesic and antipyretic properties and particularly because it acts as a tonic upon the nerve centres. The tablets of antikamnia and codeine containing four and three-quarter grains antikamnia and one-fourth grain sulphate of codeine, to my mind, present these two remedies in the most desirable form. I also find one tablet every hour, allowed to dissolve slowly in the mouth, almost a specific for the irritating cough so often met with in these complications. For general internal medication, it is always best to crush the tablets before administration.

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Original Articles.

**INNOVATIONS IN THE TREAT-
MENT OF POTT'S DISEASE.¹**

BY ALBERT H. FREIBERG, M.D.,
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While we are all of us aware of the great progress that has been made in the treatment of tuberculous diseases of the bones and joints by the application of modern orthopedic principles and the observance of well-established hygienic rules, I believe that few of us can have failed to note that certain chapters of this subject are peculiarly unsatisfactory. While, as Lorenz points out, a large proportion of the cases of tuberculous spondylitis which are submitted to proper treatment early in their history result in a cure, *bona fide*, with little or no deformity, with little or no disablement and a comparative immunity against recurrence, there remains a considerable quota of cases where our therapeutic endeavors meet with little or no reward; in some we are unable to check the onward course of the disease; in others we are confronted with a condition which experience and the teaching of surgical masters have labelled "*noli me tangere*." In many patients much valuable time is lost by the failure to establish an early diagnosis; in others, faulty, unskillful or altogether misdirected treatment is to be held responsible for the occurrence of deformities of so serious a nature and degree that the individual has thereby been permanently and more or less com-

pletely disabled. In no department of tuberculous bone and joint disease has this been as true as in that class of cases with which we are at present concerned. A tuberculous hip joint which has become ankylosed in a faulty position can be corrected by osteotomy; an angular ankylosis of the knee is amenable to the same procedure, or, in any event, to the excision of a wedge; but the gibbus of Pott's disease brings us into the presence of a deformity hitherto considered irremediable—nay, more, it has been looked upon as desirable and necessary for the repair of the ravages made upon the vertebral bodies by the destructive tuberculous disease.

It is altogether unnecessary, I take it, to dilate upon the unhappiness caused by this deformity to its unfortunate possessors; but I may be pardoned for calling your attention to the fact that not infrequently the gibbus itself is the cause of great disability, that it often compels the individual to lead an inactive life, and in many sensitive persons causes them to refrain from exercise in the open air. Of what grave import this is to one who already harbors a tuberculous focus, and who in his home is possibly surrounded by most unhygienic conditions, or even a tuberculous family, I scarcely need add. For all these reasons it is small wonder, then, that we should be dissatisfied with our results, favorable though they may seem in comparison with those of long ago; for has it not been taught that we must be content with holding the gibbus formation within reasonable limits, and that no attempt should be made to reduce the size of one already formed?

In the paralysis incident to Pott's disease we likewise find a theme at present under active discussion. Whereas,

¹ Read before the Academy of Medicine of Cincinnati, January 10, 1898.

the majority of those paralyzes arising in cases treated improperly clear up when the diseased spine is put at rest and relieved of the superincumbent weight, there is another category of cases where this fails to occur. Furthermore, there exists another class, and happily a small one, where during the progress of a mechanical and hygienic treatment, most carefully planned and skilfully carried out, paraplegia supervenes nevertheless. For the amelioration of these conditions operations upon the diseased vertebra and spinal canal have been performed, and in no small number. While it must be conceded that the results of these procedures have in many cases been exceedingly brilliant, and particularly so in the hands of certain operators, it must not, on the other hand, be overlooked that relief has been wanting in a fair proportion; that, moreover, these bloody procedures are attended with a very respectable mortality, and that it is impossible to foresee with any considerable certainty what state of affairs must be held to account for the paralysis.

The idea of preventing altogether the formation of the gibbus is by no means a new one. It is even said to be as old as Hippocrates, who is also given credit for having attempted diminishing in degree a kyphosis already formed. These ideas have appeared from time to time in the history of surgery since then, only to be speedily abandoned and presumably because of disaster following. Indeed, while Sayre is himself to be held innocent of such intention in devising and applying his plaster jacket, the same cannot be said of all who have followed him, as may be inferred from the emphatic advice against over-extension of the spine by many of the later advocates of his treatment. I am, however, aware that a great fear of injuring the spinal cord underlay this in many instances. In the face of prevailing opinion of this character it required great boldness and courage to depart from recognized practice by openly attacking the gibbus. The foundation for this was, however, laid when it became known, as the result of careful pathological study,

that only rarely is the cord pressed upon by the acute angle of the deformed spinal canal, but that most frequently the paralytic symptoms are produced by a direct extension of an inflammatory process to the meninges, and from them to the cord, or by the pressure on the cord of an epidural exudate. This fact, I have no doubt, was of great weight in influencing Chipault to become the pioneer in the methods we are about to investigate.

In 1895 Chipault inaugurated a new method in the treatment of Pott's disease by publishing the result of several cases where, after incision upon the spinous processes involved in the kyphosis, the deformity was partly overcome by manual pressure and the spine fixed in its new position by wiring several of the vertebral spines together, either by passing silver wire about them in figure-of-8 or by boring holes through them. Chipault's cases, being few and not being followed by the report of others, excited, however, but little really serious attention.

Forcible reduction of the gibbus received serious consideration only after the report by Calot of his method, accompanied by the citation of cases. Calot's method is as follows: The patient, having been chloroformed, is placed prone upon a special table. Four assistants are required. The first extends the head, a second the lower extremities, another supports the sternum, and a fourth the pelvis. While the first and second extend the spinal column forcibly and diminish the kyphosis as much as possible by this means, the operator applies both hands to the sides of the gibbus and uses sufficient force to complete the reduction. This often takes place with a distinct crepitation, to be felt, and sometimes even heard. In his first series of cases Calot often found it necessary to complete this manœuvre by the resection of one or more spinous processes, a procedure which he has since abandoned. The reduction having been completed, we come to the second essential part of the treatment—the plaster dressing. This is applied with a substratum of cotton taking in the pelvis, trunk and also the head and neck.

The importance of properly applying this dressing is strongly insisted upon by Calot, and is considered by subsequent writers to be possibly the most important advance made. The dressing is allowed to remain three or four months, being replaced at the end of this time by another one of the same kind. At the expiration of a similar period it may be discarded for one of the approved forms of corset. This method is applicable to those cases only where no very strong bony ankylosis exists. In this case Calot made a wedge excision from the convexity of the kyphosis and followed this by the redressement. In a later report Calot abandoned these cutting operations for ankylosed cases, satisfying himself with one or more incomplete reductions.

Calot's first series consisted of thirty-seven cases in patients from two to twenty years of age. He asserts that he had no mishaps in this series, that the general condition improved at once, and that the dressing was very comfortable to the patients. In one case only was there indication of meningeal irritation in the form of a very transient paresis. Accompanying this first report to the French Academy of Medicine there were presented six patients, two of whom still wore the plaster dressing. The remaining four had been operated upon from six to twelve months before. One had been without any supporting appliance for six months, two for two months, and one for only fifteen days. In none of these had there been noted any tendency toward reproduction of the deformity. At the International Congress of 1897 Calot reported a complete series of 204 cases. In these 204 cases there occurred two deaths in the days immediately following the reduction; the cause is not fully stated. In addition there occurred one death from broncho-pneumonia and two from meningitis in three or four months following.

After calling attention to the shortcomings of former methods of treatment, and especially to the fact that even a perfectly applied jacket is incapable of preventing the progress and development of the gibbus, Calot states that

this method is to operate by preventing "pressure-ulceration" of the diseased vertebrae by means of the redressement. In his second report he presented, as anatomical evidence of the stability of his results, skiagrams demonstrating the formation of laminae of new bone, 10 to 1.5 cm. long, which fix the separated bodies in their new position. In this report he likewise warns against the correction of old, firmly ankylosed kyphoses. Gravitation-abscesses are to be disposed of before redressement by recognized methods. Far from being a result of the new treatment, paralysis is considered rather an indication than otherwise. Of eight children with paralysis, six were cured of this within ten days following reduction. In the other two there was no such result as yet. In this second series the author stated that he now permitted his patients to walk only after consolidation was demonstrated skiagraphically, which may require as long as eighteen months. This has occurred in twenty cases.

Considering the boldness of this treatment, its lack of precedent and the dangers which have hitherto been anticipated from any similar procedure, this series of cases must be considered very remarkable, and notwithstanding the fact that an insufficient period of time had elapsed since the completion of the treatment in nearly all of the cases to make possible satisfactory judgment regarding permanency of results. Chipault and Calot had done that which had unsuccessfully tempted many surgeons before them, and, be the final judgment what it may, they have demonstrated beyond cavil that the dangers of interfering with the gibbus already formed have been entirely overestimated; and while the method is even now comparatively untried, it called for far less courage to follow their example than it would have taken to anticipate them. Since Calot's first publication a number of well-known surgeons have put this method to the test, and for the most part have reported results agreeing essentially with his.

Lange (*Münch. med. Woch.*, No. 16, 1897), after a careful consideration of the principles upon which the method

depends, reports a small number of cases. He concludes that the cord is in no danger of being injured by the redressement unless the ligaments, spinous processes and vertebral arches are seriously affected, and considers that the wedge excision is unjustifiable for this reason, that the reawakening of the tuberculous process and its dissemination are fairly prevented by the perfect fixation and rest afforded by the dressing, which latter is possibly to be considered the most important feature of Calot's communication. Lange believes that the separation of vertebral bodies effected by the reduction makes more room for the epidural exudate, furnishing a vent for it towards the abdomen. This may explain the favorable results in paraplegic cases. He recommends certain technical modifications: the head and pelvic parts of the plaster dressing are put on the day previous to the reduction; he uses a frame of gas-pipe instead of a table, with transverse straps to support the head and legs. The head is fastened to the upper end of the frame by a Glisson suspensorium. Traction is made by the operator himself from the pelvis, and is secured by a pelvic bandage to the lower end of the table. If necessary, direct redressement is now added. In applying the dressing he bends the head backward somewhat in order to secure from the occipital bone a purchase similar to that afforded by the iliac crests below. Lange's experience is that in cases at all recent great manual pressure is unnecessary to accomplish reduction, and he is opposed to long-continued and very forcible redressement. If the gibbus does not yield to moderate force he satisfies himself with the effect of the extension upon the unaffected parts of the column above and below the deformity.

Rédard (*Centralbl. f. Chir.*, 1897, p. 1043) reported thirty-two cases treated by Calot's method to the International Congress. In these cases the reduction occurred without mishap. In six of his cases there occurred decubitus at the summit of the gibbus. In all cases pain vanished and the general condition improved. In six fairly severe cases the spine was fixed in its new position, but

in three cases, when the dressings were removed, after two months, he noted slight return of the deformity. These were again reduced.

Jonnesco (*Annals of Surgery*, December, 1897, p. 737) also reported thirteen cases operated with slight modification of Calot's method. Instead of resorting to manual extension he uses pulleys, and applies the dressing over a flannel shirt instead of cotton wadding. He considers this treatment indicated in recent, non-ankylosed cases; but in one case of enormous firmly ankylosed kyphosis of eight years' duration he found reduction very easy. In one case a pre-existing paraplegia was at once relieved.

Helferich (*Centralbl. f. Chir.*, 1897, No. 43; also p. 1258) reports two cases with apparently good result. He considers the amount of force used by Calot unwarrantable lest pieces of spongiosa be torn off and injure the cord, and on account of the danger of reawakening the specific process.

Vulpus (*Münch. med. Woch.*, 1897, No. 36) reports the application of this treatment in several cases with apparent success. After applying a Glisson sling to the head and fastening it to a firm rod at the end of the table, he makes extension from the legs by means of a screw; the body is supported by the elbows and a hassock under the pelvis. The sternum should be supported by an assistant while the reduction is being effected. (See also *Centralbl. f. Chir.*, 1897, p. 1258). He considers that neglect of this latter precaution may possibly be to blame for a death which he reports having taken place within forty-eight hours. A short account of this case may be of interest. The patient was a boy of five and a half years, who had had spondylitis for two years and a gibbus existing for six months. The gibbus was steadily increasing in spite of a well-applied plaster jacket, and the patient was suffering severe pain. The reduction of the deformity was exceedingly easy. The child failed, however, to rally from the operation. Clonic spasms in the lower extremities and in the left arm occurred, and the pupils were strongly contracted. The removal

of the dressing and re-establishment of the deformity proved unavailing, and the death of the child resulted in coma and with accompanying rise of temperature. A complete autopsy was not permitted, but a partial one failed to show any injury to the cord or membranes at the seat of the operation. An interruption of several centimeters in extent in the line of the vertebral bodies was found, corresponding to the eleventh and twelfth dorsal vertebræ, which had been almost entirely destroyed. A caseous abscess was found in the left psoas sheath. There is no doubt that death was the direct result of the operation.

In applying the dressing Vulpius changes the position of the patient from the horizontal to a vertical one, suspending him by the feet and attaching a weight of from twenty to forty pounds to the head. With the exception of the case above mentioned, Vulpius is well satisfied with his results, though he is not yet assured of their permanence.

Bilhaut (*Rev. Zeitschr. f. Orthop. Chir.*, 1897, p. 344) recommends Calot's treatment on the strength of fifty cases of his own. He considers it contra-indicated in cases of long standing or far advanced, and, furthermore, in the presence of tuberculosis pulmonum and degenerations of liver and kidneys.

The authors heretofore cited have declared themselves in accord with Calot, and with varying degrees of caution and reserve. That forcible reduction of the gibbus is not necessarily free from danger is demonstrated by the case reported by Vulpius, and opposition, both theoretical and practical, is not wanting. Most uncompromising of all in his antagonism to Calot is Ménard (*Gaz. Hébd.*, May 30, 1897), who regrets that Chipault and Calot have not sufficiently taken into account the nature and gravity of the disorders which their manœuvres may produce. He attempts doing this himself by experiments and observations upon cadavers and museum specimens. He agrees as the result of these that the cord is in little or no danger. However, in one experiment the reduction caused the rupture of a pus collection, which *in vivo* must have emptied into the mediastinum. His

experiments have shown that in cases reasonably advanced the redressement produces a diastasis between the two segments of the column, varying from 2.0 to 8.0 centimeters. The cavity produced must be filled with a bony mass if recurrence of the deformity is to be prevented. His anatomical studies have shown him that the periosteum of the vertebral bodies is profoundly altered in spondylitis, and sometimes entirely destroyed, and that it shows no sign of new bone formation at any period. This latter is seen only at the summit of the gibbus, and would prove insufficient in the case of great diastasis as above set forth. His conclusion is that Calot's method is without scientific foundation, that it is dangerous in performance, and that if the gibbus be at all extensive the deformity must recur.

Vincent (*Lyon Med.*, 1897, No. 27) places himself in opposition on the basis of clinical facts. Nearly all of his operations have been followed by re-establishment of the deformity—occurring within the plaster dressing at that. This occurred in five out of seven patients. In one patient four years old the reduction was perfect; in one month the dressing had to be changed, and recurrence of the deformity was found to have taken place. In addition the patient now had retention of urine and pulmonary tuberculosis. In one case the dressing could not be tolerated; in another the result was also a failure. Three times it was impossible to accomplish the reduction without resorting to extreme violence. In this discussion Ollier joins the author in warning against the treatment. (The strictures made upon Calot and his method by both Vincent and Ménard are in a tone which seems without doubt tinged with animosity, and one which might almost be termed personal.)

Lorenz (*Deutsche med. Woch.*, 1897, No. 35) agrees with much of Ménard's argument. He calls attention to the fact that cases treated early and properly by means of hitherto recognized methods recover in large proportion with extremely slight gibbus. In addition the Calot dressing cannot altogether suspend muscular action, and cannot,

therefore, be expected to prevent entirely a return of the deformity. He reports a case of his own where an extremely easy reduction was followed by complete paraplegia, still continuing two months afterwards. In this case there occurred also a vesico-rectal paralysis, which was, however, only transient. The gibbus returned to a certain degree.

Since it is not our object to add a casuistic contribution to the literature of this subject, but rather by a critical review of that existing to frame for ourselves rules of conduct in the treatment of tuberculous spondylitis, it were now proper to devote some attention to the objections and recommendations of those who have busied themselves with it, practically and theoretically. Superseding in importance the functional and cosmetic results of Calot's procedure, is the question of mortality. In the comparatively few cases thus far reported we find notice of deaths consequent upon the operation, both directly and indirectly. While it is not feasible in the present state of the question to formulate a percentage of mortality, we can, nevertheless, note that in his series of 204 cases Calot reports two deaths in the days immediately following the operation. Vulpius records one death directly attributable to the redressement, and Jonnesco one after forty-eight hours from unknown cause. In addition, the last-named writer had one death which he attributed to chloroform. He and Calot have each of them reported a death from broncho-pneumonia. While these facts indicate that the question of mortality cannot be entirely ignored, the number of deaths is fairly small in so respectable a number of cases, and need not figure very largely in the summing up; it is certainly not as great as that of many other operative procedures which we are in the habit of recommending without hesitation. A certain mortality from the operation was to be expected, inasmuch as deaths have long ago been reported occurring during forcible extension of the spine under anesthetics by Langenbeck, Willett and others (Nebel, Volkmann, *Samm. klin. Vortr.*,

N. F. No. 191). While the number of operations hitherto reported is rather too small to permit of conclusions that shall be binding, it is only fair to expect and believe that careful selection of cases will much reduce this immediate and direct mortality; it will, nevertheless, be our duty, in recommending this procedure in practice, to be mindful of previous experience, and to warn our patients, or at least those who are responsible for them, that the operation is not wholly devoid of danger.

In discussing the remoter effects of this operation upon the general health of the patients, we are attacking a problem more difficult of solution than the question of direct mortality. To him who has carefully studied the subject of tuberculous bone and joint lesions it must at once occur in considering this question, what is the danger of disseminating a process by our interference which was primarily local? We are all of us familiar with the cases of this character occurring after secondary—or, for that matter, even primary—operations upon the bones and joints; particularly has this been the case in connection with hip- and knee-joint disease. That under these circumstances operative procedures are to be held accountable for the dissemination of a local tuberculosis, or, on the other hand, for the reawakening of a tuberculous process which had not lost its acuity and tendency to progress, there can scarcely be a doubt; nor are we likely to be satisfied with Lange's consolation that these dangers are counterbalanced by the increased facility in putting the spine at rest and by the diminution of pressure on the part of the exudate (*loc. cit.*). While I have been able to find but four cases of this character in recent literature, it is possible that the whole truth has not been told, in this regard at least, and until further experience settles the matter these must remain as important theoretical objections to the method of forced reduction.

At this stage of our theoretical consideration we must revert to the objections made to the method by Ménard and above referred to, the effect of which is that the affected part of the

spinal column is not capable, in the majority of cases, of sufficient plastic activity to repair the break in its continuity necessarily made by the redressement. That this is not always true is known by some of the earlier cases operated upon, especially those of Calot and Rédard. On the other hand, the following cases reported by Murray (*British Med. Journal*, December 4, 1877, p. 1630) show that Ménard's conclusions have practical application:

The first case is that of a boy, aged four years. Spondylitis of three years' duration. Gibbus in lower dorsal region. No abscess or paralysis. Died from pneumonia two months after reduction was made. Autopsy showed three vertebrae involved and one completely destroyed. There was not the slightest evidence of repair; but the gap formed by the straightening had resolved itself into a false joint bounded by caseous and diseased tissue. There was no abscess nor evidence of general tuberculosis, and the cause of death was not to be attributed to the operation.

The second patient was a girl, three and one-half years old. Dorsal spondylitis of two years' duration. Died three months after straightening, with symptoms of meningitis. After death the back was found "wobbly" at the seat of fracture. Though the child had been kept recumbent since the operation, there was not the least evidence of repair. There was general tuberculosis and tubercular meningitis.

The second of these cases was one of general tuberculosis, chargeable, without much doubt, to the effect of the straightening operation, but both of them are striking anatomical demonstrations of Ménard's argument, the chief criticism of which must be that his investigations seem to have been for the most part upon advanced cases with extensive destruction and severe deformity, and therefore not generally applicable.

That such rough treatment of the spinal column as proposed by Calot would result in paralysis by damage to the cord was *a priori* very probable. This has, however, not been the case. We find mention of no such occurrence

in the large series of Calot and Rédard, nor have others reported it with the exception of Lorenz, whose case we have already mentioned. Even Ménard, who must be classed as a most rigorous antagonist of this method, grants that there is little or no danger of wounding the cord. Lange warns us, however, that extensive disease of the ligaments, transverse and spinous processes make this easily possible. How are we to recognize this before operation? I can surely not answer this question, unless we may expect assistance from skiagraphy. However, the advocates of the redressement forcé are not to be satisfied with having shown us that the cord is in little or no danger from this procedure; we are to be still more astonished by hearing from them that paralysis should be considered an indication for its performance. And however strange this may seem theoretically, the cases thus far reported appear corroborative. It is true that we no longer consider the paralysis of spondylitis as due to the acute angle of the gibbus, and we have the best of reasons for so doing, but the disappearance of this paraplegia has followed the reduction with sufficient frequency to rule out mere coincidence. In the discussion of this subject which took place in the French Academy, Péan reported a case in point. It was that of a girl, fifteen years of age, with a very large gibbus of five years' standing and with paralysis of the lower extremities. She had been immobilized for two years without avail. Within one week after redressement the paraplegia began to improve, and finally disappeared entirely. Monod, who led the discussion, attempted in his concluding remarks to dismiss this as an accident, but were this not precluded by the very history of the case we should still have considerable evidence to the contrary in cases reported by Jonnesco and Lange. Should future experience corroborate this testimony, forcible reduction may well stand rivalry with bloody operations for this purpose, the results of which have not been invariably brilliant, and which are quite formidable and not a little dangerous to life.

There is one aspect of this subject which I approach with considerable diffidence, and that is the question of recurrence of deformity after forcible straightening. In the light of anatomical investigation it would seem as if many cases were absolutely doomed to recurrence. This was Ménard's opinion, and seems borne out by the cases reported by Murray. In addition to this several cases of this kind have been reported, notably those of Vincent and Rédard. In what proportion of cases an early recurrence is to be looked for is a matter which future experience only can decide. Be this decision what it may, the following words of Hoffa, written in 1891, seem to me extremely pertinent:

"Even though the inflammatory process has run its course and is healed, we can, nevertheless, in certain cases, not prevent the increase of the deformity, be the treatment ever so skillful. . . . It must be assumed that in these cases the inflammatory process has attacked those points from which the growth of the vertebral bodies proceeds, that these latter have lost their ability to grow in comparison with the uninjured vertebral arches, and that on account of the relatively more rapid growth of arches and spinous processes the size of the gibbus must increase until the close of the growing period. We shall be as little able to prevent the increase of the gibbus under these circumstances as to prevent the abnormal position of a hand in the presence of unequal growth of radius and ulna."

In this I believe we may find another reason for expecting a later return of the gibbus, even though the immediate result of the operation has left nothing to be desired.

It is possible, then, that in the face of all the testimony before us, both adverse and favorable, that Calot's method will not stand the test of time. Nevertheless, the painstaking and conscientious efforts made by Calot and the others who have occupied themselves with this question cannot fail to have greatly advanced our knowledge of this disease, and are certainly destined to modify, in some degree at least, our

present principles of treatment. The plaster dressing as applied by Calot is certainly to be considered an improved method of immobilizing the spine, and it seems justifiable to adopt forcible reduction, or at least forcible extension, in cases of recent date and where the gibbus has not yet attained to any great proportions. In cases of paraplegia, also, this method promises much, and especially in those where simpler methods of immobilization have failed of their object. Regarding cases of long standing and high degree of deformity, it appears to me the part of wisdom to refrain from such active treatment as this until time shall have brought us reliable and definite information regarding the cases of this character which have already been operated upon. Until then we can only deprecate the enthusiasm of the French newspaper writer in exclaiming: "*Il n'y aura plus de bossus dans le monde.*"

In conclusion, I beg to submit the following statements for discussion:

1. Forcible reduction in Pott's disease involves danger to life; this is, however, not sufficiently great to banish it as a warrantable procedure, and especially in properly selected cases.
2. The reduction of firmly ankylosed kyphoses is to be condemned.
3. The justifiability of reducing a gibbus involving a considerable number of vertebræ is doubtful.
4. The application of this method is justifiable in cases of paraplegia where the older methods of immobilization have failed. This method is probably no more dangerous to life than the bloody operations for this purpose.
5. It is exceedingly probable that many kyphoses treated by this method will recur.
6. Forcible reduction may prove of great value in severe rachitic scolioses and kyphoses, and under these conditions will probably be found to be almost without danger.

[FOR DISCUSSION SEE P. 168.]

COFFEE is an excellent vehicle for the administration of the iodides of potassium and sodium.

TREATMENT OF RECTAL DISEASES.¹

BY GEO. J. MONROE, M.D.,
LOUISVILLE, KY.

The treatment of rectal diseases is a very large subject. When I selected this topic for a paper to be read before this intelligent body of physicians I did not expect to refer to the treatment of all rectal diseases. I shall only discuss the treatment of three of the most common — hemorrhoids, commonly called piles; fistula; and irritable ulcer, commonly called fissure. On account of limited time I can only touch, as it were, upon these three. The literature of rectal diseases has become very extensive during the last ten years, hence I do not expect to bring anything new before you. What I may say may benefit some present who have not the means of access to the publications upon this subject. There are many comprehensive and complete works before the public treating upon this class of diseases.

PREPARATORY TREATMENT OF HEMORRHOIDS.

I believe, as a rule, we find a sluggish liver in patients who have piles. Therefore, I think it well to give calomel several days before we operate upon the tumors. We find this condition of the liver especially in internal hemorrhoids.

R Calomel, gr. v
Sodæ bicarb., gr. xxx
M. Ft. chart ten.

Sig.—One every hour, to be followed by one or two seidlitz powders.

If we desire a rapid result from seidlitz powders they should be given in as hot water as the patient can take.

The above prescription should be given three days before treatment. The night before treatment the patient should take one tablespoonful of castor oil. Give the oil as follows: Put tea-cup in hot water for a few moments; when it is hot put one tablespoonful of whisky

in it; on top of this put one tablespoonful of castor oil; on top of this, again, put one tablespoonful of whisky; now rinse the mouth with listerine, and then swallow contents of cup at one mouthful; rinse the mouth again with listerine. By taking the oil in this way no taste is noticed, and patients will not object to taking it.

One hour before operating have patient use an injection of one pint of warm water with one teaspoonful of boracic acid dissolved in it. A general bath may be taken the night before treatment.

EXTERNAL PILES—GRAPE VARIETY.

External piles of the grape variety I usually treat without an anesthetic. I wash the parts well with soap and water. I usually use the tar soap (Packer's). I then saturate absorbent cotton with hydrogen dioxide and wash with this. I have the patient lie upon the side on which are the tumors, with his knees well drawn up towards the abdomen. A north light is the best light for any surgical operation. We may saturate cotton with a 20 per cent. solution of muriate of cocaine and press against the piles. This may, to some extent, destroy sensation.

I now take a very sharp knife and make a vertical incision into the pile; sometimes I make a cross cut also. The blood-clot escapes, or by making slight pressure it will come out. I now syringe the cavity with hydrogen dioxide. This injection speedily controls the bleeding. It seems to be one of the effects of hydrogen dioxide to control hemorrhage. I now press into the cavity iodoform gauze, covered with absorbent cotton, and fasten with a T-bandage. No further attention, as a rule, is needed. After the second day the parts may be washed daily with boracic acid and water, or hydrogen dioxide. After the second day we should aim to have an action of the bowels each day. We may give a three-grain pill of cascara sagrada extract for that purpose.

EXTERNAL PILES OR TABS.

About the only treatment of any service for these are their removal.

¹ Prepared for the West Virginia State Medical Society.

We may use the muriate of cocaine to anesthetize, or freeze them with ether spray. Then cut them off with a heavy bladed scissors. They should be dressed the same as the grape variety. Sometimes the stump will bleed quite freely after removal. This can be controlled by pressure. Apply the T-bandage tightly should there be much bleeding.

INTERNAL OR BLEEDING HEMORRHOIDS.

I use the same preparatory treatment as I do in the external variety.

Ligature.—Have patient under chloroform. Place him upon the side. Have one assistant hold legs. Introduce fingers into the rectum and stretch the sphincter. Catch each pile with any good pile-forceps, draw it well outside, with scissors separate it from the skin. Have needle threaded with strong silk or linen, pass it through base of tumors and tie each side as tightly as you can. Cut off top of tumor; be careful not to cut too close to ligature for fear it might slip off, allowing a dangerous hemorrhage to take place. This occurred to me once. Treat each tumor in the same way. We may then use bichloride of mercury, 1:5,000, as a wash, or hydrogen dioxide, 1:10. This may be used with a fountain syringe. Now press the remnant of the piles back into the rectum. Press iodoform gauze into rectum and apply externally. Over this place absorbent cotton and fasten with a T-bandage. This dressing should be changed about the third day, and the parts thoroughly cleansed with the hydrogen dioxide. A new dressing of the gauze and cotton should be applied. The patient should remain in bed and be kept quiet with sulphate of morphine or McMunn's elixir of opium. The parts should now be dressed every second day. Upon the fifth or sixth day we should aim to have an action of the bowels. This can be accomplished with castor oil or one or two seidlitz powders. It requires from two to five weeks to produce a cure with the ligature.

Objections to the use of the ligature are first, severe pain; this is sometimes extreme. This can generally be controlled by the use of some opiate. The

urine has often to be drawn by catheter. We may have septicemia and tetanus. Secondary hemorrhage may ensue when the ligatures come off; this is from the seventh to the twelfth day. As a rule, the treatment by the ligature is eminently successful.

The Clamp and Cautery.—The patient should undergo the same preliminary treatment as used when the ligature is made use of. Chloroform should be given, the patient placed upon the side, atony produced, the piles drawn outside and dissected up so the clamp can be applied, the clamp applied and locked, the top of the tumors trimmed off with scissors and seared with the Paquelin cautery, or an iron at a red heat. After the searing the clamp may be loosened a little; if there is any bleeding tighten the clamp and again apply the hot iron. Each tumor may be treated in the same way. The dressing is the same as in the ligature treatment.

There has been a defect in the clamps until the introduction of Dr. Gant's, of Kansas City. I think his clamp is perfect. There is some danger of primary hemorrhage from the use of the clamp and cautery, but not as much now with the improved clamps as formerly. As a rule, the pain is not very severe. Occasionally we strike a case that requires large doses of morphine to control the excruciating suffering. I do not know the reason of this, unless it may be that we have an unusual supply of nerves in the piles, and the burning sets up the pain. This is mere conjecture on my part.

I keep my patients in bed a few days, then allowing them to sit around in their room for a few days longer. We may have ulceration following this method of treatment, as we may from any method. In that event we have a long, tedious convalescence. Ulceration here should be treated the same as ulceration elsewhere.

Hypodermic Injection of Carbolic Acid.—This method of treatment I have been much interested in, being a pioneer in its use. I have had many good results from it. I prepare my patients in the same way as I do for the ligature or the clamp and cautery. I now produce

atony of the sphincter muscle before operating upon hemorrhoids. I have patient strain the tumors down by sitting over a commode or water-closet. Have them lie down on my table on either side with knees drawn up to abdomen. The combination I use is as follows:

R Carbolic acid (Calvert's) . . . 3i
 Olive oil . . . 3ij
 M. by putting bottle in hot water.

There are many other combinations, but the carbolic acid is the effective ingredient in them all. I suppose it makes but little difference what the carbolic acid is mixed with. I inject each tumor with the above. About as good a rule to govern the quantity used as I know of is to inject sufficient into each tumor to turn it white. This takes from three to fifteen drops. Large piles I frequently inject in two or three places. I now oil the tumors well with vaseline containing boracic acid and press them into rectum. I apply iodoform gauze and cotton outside, and fasten with a bandage. One part of carbolic acid to three of olive oil generally produces sloughing. In order to have a permanent cure we necessarily must have sloughing. I never have been able to eradicate piles with this method of treatment without sloughing. I know temporary relief may be given by using a weak solution of the acid, but in a few months' time the piles return. Patients that I cured twenty-five years ago, where sloughing took place, have had no return.

Objections to the Treatment.—Sometimes we have severe pain for several days. This can be controlled by the free use of sulphate of morphine. Occasionally, but seldom, the catheter has to be used. We may have more extensive sloughing than we desire. This hardly ever occurs if the pile is only injected. I have seen a few cases of marginal abscesses and fistula result from the treatment. I have seen one case of stricture. I do not believe there is any more danger of septicemia than there is from any other method of treatment. I do not believe there is carbolic acid enough used to effect the kidneys. I have never seen a case of heart clot. I have had a few cases of

secondary hemorrhage, but so I have had from the ligature.

There are other methods of treatment of hemorrhoids, but the three given are the only ones really worthy of mention. I do not believe any others are used to any extent in this country. Whitehead's method for a time was used, but it is so difficult to perform and is no better, and in my estimation not as good as the methods I have given, and it has been almost entirely discarded.

FISTULA.

In the treatment of fistula of ano and rectum I prepare my patient in the same manner as I do in piles. There are only two methods of treatment of fistula worthy of mention, to-wit, the knife and ligature. Complete fistula I treat as follows with the knife. I pass a grooved director through the fistula from the outside; I introduce the forefinger, catch the point of the director, and withdraw it from the anus; now cut all of the intervening tissue between director and rectum; search for side-tracks, and if found lay them open; if any large arteries are found ligate them. If the fistula is incomplete make it complete and treat in the same way. If of the horse-shoe variety, pass your grooved director as far as you can and lay open; now pass your director farther and again cut. Continue this process until you have reached the limit of the sinus. It is hardly necessary to curette; I seldom ever do it any more. I now syringe with bichloride of mercury, 1:5,000, or the hydrogen dioxide, 1:10, does equally as well, if not better. Both seem to have the effect of controlling hemorrhage. I now pack the wound rather tightly with iodoform gauze; over this I place absorbent cotton and fasten with a T-bandage. I give one-fourth grain of sulphate of morphine to control pain and to keep the bowels from acting. The third or fourth day I remove the dressing, wash with bichloride of mercury or hydrogen dioxide, and lightly press the gauze into cut, cover with cotton and fasten. About the fifth day I dress again, and aim to have an action of the bowels. Every second day redress. It takes from two weeks to six

or eight for a fistula to heal. This depends upon the extent of fistula and operation, as well as upon the recuperative power of the patient.

The Ligature.—Prepare the patient in same way as for knife. I use the rubber ligature. I apply it as follows: Thread a common silver probe with the ligature; oil it well with vaseline; pass it through fistula from outside; pass finger into bowel and draw out the end of probe; the probe will bend, allowing this to be easily done. I now catch the end of the probe with a tooth-forceps and withdraw it; this draws the ligature into fistula. I now pass both ends of ligature through a perforated lead-shot. Draw the ligature down with considerable force, slipping the shot up. When you have used all the tension you think the ligature will bear, compress the shot with tooth-forceps. Rubber ligatures we cannot tie. In long fistulas I sometimes put on two shot; compress the outside one, and if necessary after a few days to tighten the ligature press the upper one up farther upon the ligature and compress it. The ligature will cut through in from three to ten days, depending upon the amount of tissue to be cut.

It is necessary to keep the parts clean in using the ligature. This may be done with hydrogen dioxide or a saturated solution of boracic acid. I keep the iodoform gauze and cotton applied. The ligature is painful for the first day or two. We cannot reach side-tracks or sinuses with it. In consumptive cases we have, I think, better results from the ligature than we do from the knife.

I do not think it is a good idea to keep fistulous patients very long in bed. I try to get them up and around the room as soon as possible, and just as soon as I consider it safe I get them out doors. We should avoid, if we possibly can, cutting the sphincter muscle more than once; we are very apt to have incontinence of feces result if we do. I would much prefer a fistula, bad as it is, than to have incontinence of feces. Fortunately, the majority of external openings in fistulas converge into one before entering the bowel. The greater number of fistula patients require build-

ing up by means of a good tonic. I like cod-liver oil and the syrup of hypophosphites.

FISSURE OF THE RECTUM AND ANUS.

There are three methods of treatment of fissure or irritable ulcer of the rectum. I usually begin my treatment of this disease by giving calomel. The liver is sluggish in nearly all cases of fissure.

℞ Calomel, gr. v
Sodæ bicarb., gr. xxx
M. Form powders ten.
Sig.—One every hour.

This should be followed by a seidlitz powder, or some of the laxative spring waters. French Lick, Blue Lick, White Sulphur, Red Sulphur, Carlsbad, Hunyadi János and Apenta are all good. I repeat the calomel once a week for four or five weeks. Some of the waters should be used daily or every second day.

TREATMENT.

Frequently we can cure fissure by the use of local applications. Among these we may mention nitrate of silver, three grains to the ounce, applied with a camel's-hair pencil or cotton wrapped around a probe, every other day. A little cotton with vaseline, castor oil or lanolin may be kept on the anus. I have recently cured several cases of fissure as follows: Wash the parts with tar soap and water, then wash with hydrogen dioxide; saturate absorbent cotton with a 20 per cent. solution of muriate of cocaine, press a portion of this into anus and a part on the outside. In eight or ten minutes remove this, apply hydrogen dioxide to fissure; follow this with balsam of peru. Repeat this daily.

I give my patients what I call menthol ointment:

℞ Menthol, } aa 3i
Carbolic acid (Calvert's), }
Oxide of zinc, 3ss
Oil of almonds, 3ij
Benzoated lard or
Cerat simplex, 3iv
M. Form ointment.
Sig.—Apply twice a day.

This method of treatment will cure fissure in from ten days to three weeks.

There are many other local applications which are said to cure.

Forcible Dilatation.—Forcible dilatation, stretching, or atonizing the sphincter muscle I perform as follows: I put my patients through the same preliminary treatment that I do in piles. I give chloroform and cleanse the parts well. Place patient on side, with knees drawn up to abdomen. Oil forefingers with borated vaseline. Introduce into rectum back to back. Separate the fingers as far as you can without tearing the muscle; this wants to be done in all directions. Now take the sphincter muscle between the fingers and thumbs and pinch it until it is soft and pulpy. Now wash with the hydrogen dioxide, press some iodoform gauze into rectum, and apply outside; over this put the absorbent cotton and fasten with a bandage. Give one-fourth grain of sulphate of morphine and put your patient to bed. The dressing should be changed every second or third day. In the treatment of fissure I aim to have an action of the bowels every second or third day; after eight or nine days I have an action daily. I do not keep my patient very long in bed; two or three days is all that is necessary.

When we use the knife we use the same preliminary treatment. Have patient upon the side, give chloroform, wash the parts well with the corrosive sublimate, 1:5,000, or the hydrogen dioxide, 1:10. Draw knife blade through the fissure. I do not find it necessary to cut very deeply; I should say that the depth of a line is sufficient. After the cut is made the dressing should be similar to that used after forcible dilatation.

I have now hurriedly passed over the treatment of the three most common diseases of the rectum. Of course, I have not entered into the minutiae of each method of treatment. I have tried to make myself understood so far as I have gone. If there is anything that I have failed to make plain I wish that you would state wherein, and I will try to explain.

I thank the members of this association for the close attention you have given me.

442 W. Walnut Street.

Translations.

NOTES FROM THE HISTORY OF MEDICINE.

FROM THE WORKS OF DE BORDEU.

TRANSLATED BY T. C. MINOR, M.D.,
CINCINNATI.

SECTION VII.

Medicine in Gaul—Demosthenes, Crinas, Charmis, Marcel, Gallic Physicians—Works of Marcel Favorable to Empirics.

Galen speaks of a Demosthenes of Marseilles, yet we can scarcely be permitted to count him as a Frenchman, especially if he was the man who was a pupil of Alexander the Herophilian, and one well known in Phrygia. Le Clerc says that we cannot be certain it is the same man, so the question cannot be decided positively. However this may be, one of these Demosthenes, if there were two, was much occupied with the study of the pulse. Those who regarded Herophilus, his master in the art, as a charlatan cannot, without falling into manifest contradiction, praise Demosthenes.

Crinas, who followed Pliny, practiced medicine in his own country before going to establish himself at Rome, and merits, for this reason, a more just title to the claim of being a Gallic physician than Demosthenes. He was distinguished as a student of astrology, that he made the basis of his medicine; he is even yet remembered for the great sums he left when dying to Marseilles for the purpose of rebuilding that city's walls.

He might not have given a like mark of attachment to his country had he been able to see a scene enacted at Marseilles several centuries after his death. A charlatan of the seventeenth century assembled many fashionable people in that city, pretending to give a proof of his medical and astrological knowledge. Up to this point the charlatan resembled Crinas very much. A physician from Montpellier, named Louvet, refuted the charlatan's absurd

claims in a very active manner, and the inhabitants of Marseilles grew very much ashamed of their own credulity.

How would Louvet have answered had the charlatan replied to him: "I only give here the doctrines of one of our most celebrated townsmen, the man whose wealth built the very walls around Marseilles. Can it be that the people of this city have so little respect for the memory of Crinas? He was a great Gallic physician who lighted up Rome with his medical brilliancy. How can Louvet dare, in your presence, to slander your countryman and his distinguished *confrère*?"

The charlatan, besides, might have defended his views by the example of the famous Michel Nostradamus, another Provencal doctor and graduate of Montpellier. We know his almanac; we know how ardently he studied medicine and astronomy; we know he was physician to King Charles IX, and had practiced at the Court of Henri II. Finally, we cannot ignore the fact that he freed himself very adroitly from the order given him on the subject of the children of Henri II, whose destiny all wished to know. Nostradamus did so well that we do not know what he really did say on this occurrence. He was not the first intriguer who, under similar circumstances, has made a prognosis that was forgotten by all the world. It is no less certain that the charlatan at Marseilles might have no less embarrassed Louvet; he might at least have quieted the noise made by the latter, who published his victory over charlatanism everywhere.

Le Clerc and Bernier class among Gallic or early French physicians, Charmis, a native of Marseilles, as was Crinas; these two historians report, on the subject of Charmis, that which Pliny has said, *i.e.*, that he established the fashion at Rome of cold baths. It is remarkable that cold baths originally found favor in cold countries. We know how the English do as they all do in the north. The French physician coming from a cool country had a regard for the climate of Rome. For the rest, we cannot judge of the reasons that led Charmis to give a preference to cold

baths over hot baths. The theory of this remedy is too little known. We are led to believe that the inhabitants of hot countries have, in general, a greater fear of cold water than the inhabitants of cold countries; perhaps the cold baths excite and stimulate their vital forces, and warm baths, perhaps, while refreshing, are enervating; in the latter case there would be less inconvenience in using hot baths than cold baths.

But all this belongs to different national empiricisms, and it would seem there is no risk in putting Charmis, the same as the two other Gallic physicians, Crinas and Demosthenes, in the number of empirics or demi-empirics. Medical dogma had as yet not made much progress among the Gauls. Medicine was practiced much as it had been among the Druids—that is to say, they cultivated empiricism—and it might be said of the Gauls, as has been said of the Romans, they had no real physicians for several centuries.

There remains to us, however, a complete body of medicine laid down by a Gallic doctor; this is the work of Marcel, called *the empiric* in order to distinguish him from another Marcel, who was a physician and poet and lived under Marcus Aurelius, while Marcel the empiric lived under Theodosius. The first was distinguished by a great work on lycanthropia, which is a species of melancholy.

The second, or Marcel the empiric, was from Bordeaux. Le Clerc doubts whether he was really in practice, although he has written on medicine. Bernier remarked that Scalager believed him to be a Pyrrhonian; it is this that may clear up the manner in which another historian explains the subject of this Marcel, and remarks: "Marcel was a physician, although he appears to have never studied medicine, while Marcel the empiric probably was a doctor who practiced his profession. This Marcel made, with much care, a collection of a great number of recipes and formulæ of remedies appropriate to all diseases of the human body, this collection being made after ancient and modern physicians and after hearsay, and he followed the profession like so

many others, without knowing much about the healing art."

If Marcel was a physician, and if he followed the practice, he was a doctor indeed. If he collected his recipes with much care, and from ancient and then more modern medical men, he had studied the art of healing. We shall not say that he took his degrees and medical diploma, for it is only that which we of the present day call studying medicine. But he had read his books, and was a practitioner; he was, then, a physician like a vast number of others. A diploma does not always make a doctor.

We might be more clear and say with Le Clerc: "Marcellus must be classed as a physician because he has written on medicine, although his preface might possibly lead one to doubt whether he ever practiced." In fact, judging from his preface, he may have only been an amateur, and wished to put himself in the class of Pliny and other physicians; meantime, he speaks of his personal experiences. He dedicates his work to his children, and hopes, by means of this book, they will pass as doctors; nevertheless, he advises them to consult the profession if they choose, and take advice as to the preparation of remedies.

Marcel divided remedial agents into two principal classes—the empirical, the use of which had been taught by popular practice, and the rational method, in which reasoning dictated the application and variety of drug to be employed. Thus Marcel appears to have had the intention of uniting both sects of medicine, the empirical and dogmatic, giving the *first place* to empiricism.

This plan of conciliating the sects, by taking what might be the best of both, perhaps induced Scalager to regard Marcel as a Pyrrhonian, or a practitioner in both sects. We see, following medical history, this division of Marcel's agitated anew by various medical authors, in almost the same terms, up to the present day.

We know a physician who had resolved to make a critical and historical commentary of Marcel's work. He tried

to prove that the extraordinary and very singular remedies proposed by this author were less due to empiricism than to the abuse of dogma. Certain opinions only enter heads filled with the pride of knowledge and too many researches, plunging into a tissue of odd ideas that are far off from nature.

However this may be, the work of Marcel gives an idea of the manner in which medicine had progressed among the Gauls at the first centuries of the church. It is sufficient to convince us we cannot cry out against the misfortunes of our compatriots of that period. They were not deprived of medicines, although they had no knowledge of the turns and twists that the healing art afterwards underwent. It grew more dogmatic or more scholastic than empirical, instead of, as it was among the Gauls, much more empirical than dogmatic.

Scholastic medicine, that afterwards made so much noise in the world, and which advanced daily to its loss, was not yet born; its germ contained in the writings of Aristotle and Galen had not yet been fecundated. The spirit of chicanery or dispute took its place afterwards among those who cultivated the sciences, or who permitted themselves to fall into a fatal languor in place of really becoming cultivated.

SECTION VIII.

Ausonius, another Gallic Doctor—His Virtues, his Country, his Imitators—The University Absorbs Empiricism—Attack of Riolan against the Empirics—Royal Commission of Medicine—Modern Remedies Furnished by Empirics—They Tolerated Inoculation.

The work of Marcel shows us the manner in which medicine was taught and practiced in France towards the fourth century of the church. The history of Ausonius, a Gallic physician who lived in the same century, gives us even a better knowledge of the part played by doctors at that time. His life, if we are to believe the poet Ausonius, his son, was that of a model physician.

He was born at Bogis, a small town in Landes, fifteen miles from Bordeaux. He practiced medicine in the latter city, where he acquired the greatest celebrity. He was the first physician of his time, and well known in all the neighboring towns. He was in moderate circumstances; his manner of living frugal, modest and always the same. He was devotedly attached to his profession. He was a good friend, a kind father. To his mind those only are happy who are content with what God gives them. He had but little curiosity about other people's affair. He was neither ambitious nor high tempered; he knew how to correct this last vice. He avoided tumultuous gatherings. His wife was from the town of Aix, sister of a celebrated rhetorician who distinguished himself at Toulouse.

Ausonius died at the age of ninety years, without having felt the miseries of old age; he still walked without a cane. It was said of him that he imitated no one, and that no one was able to imitate him. He was a prefect of Illyria and a member of the Senate, but the manner in which his son explains the holding of these public offices proves that the father had more titles than the enjoyment of the honors; he never troubled himself about exercising his authority, for, as Bayle remarks, "it seems that Ausonius only regarded his titles as honorary, and cared nothing for appointments or fees." Ausonius the physician was a native of Bordeaux, as were several other celebrated Christian authors. He was chief physician to Valentinian II.

Scalager also advanced the idea that Ausonius was physician to Valentinian. Bayle, without doubt with much more reason, doubts this, as Ausonius the poet son never mentions this; so that this is at least suspicious. Several authors have classed Ausonius the son as a Christian, but we cannot find where the Christianity of the father is mentioned; the son does not say so. It seems, then, that our historian has applied to the father what has been said of the son. Ausonius the father, as we have remarked, was a citizen of Bogis, and not of Bordeaux; this all the world

knows. There is no doubt that Ausonius the father possessed the titles to offices without exercising the privileges, since Ausonius the son says he had the titles without using the privileges. We cannot see how historians can prove he had appointments and fees.

We find in the *Journal of Medicine* (1763) strong reflection touching the physician of Guicune on the subject of Ausonius, their compatriot. It is there remarked that, according to Ausonius the son, his father was never a witness nor a prosecutor of any one; that is to say, according to the commentary of Bayle: "He had an aversion to trials by law; he had no envy, neither political ambition; that he classed swearing and perjury in the same class; that he was never in any conspiracy nor any cabal; that he never told anything against the reputation of his neighbors." This was doubtless what made him so highly honored as a physician, and is a strikingly good example for all doctors to follow.

Yet the compatriots of Ausonius, the people of Bogis and its environs, were no less zealous than the physicians of this province to imitate the morality of Ausonius. His candor and honesty were always revered by his countrymen; he had also a high character for probity.

This eulogy is due the people of this section, where blackness, baseness and perfidy are pointed at with the finger of scorn; where the notable inhabitants were always distinguished, either in the church, public offices or the sciences; where any one who wandered from the ordinary track became the object of public indignation and the contempt of all. There they preserve and cherish the memory of a crowd of great men of all kinds. Every century affords material for eulogies similar to those the poet Ausonius wrote on the illustrious dead of Bordeaux. Towns narrowly separated from each other abound in this portion of the meridional provinces; it was the cradle of Montaigne, the Hucks, Bayle, Pardis, Scalager, Abadie, Marca, Elicaganay, and the immortal Montesquieu. Fathers still point out their birth-places to their children.

They revere, notably, in the country of Ausonius, the birth-place of Bertrand Goth, a pope, and the houses that some of the cardinals of the church dwelt in. They are also proud of Espagnet, who lived in the seventeenth century. It is to this man of letters that medicine owes much through his taste for chemistry, and Guicune received his first notions on modern philosophy. He carried his cases so far as to publish his meditations, then too little known, on the education of princes, and also instructions for all conditions of life.

Happy those who may have profited by the lessons and examples of all these great and good men!

Empiricism lasted in the condition that Marcel, and doubtless Ausonius, left it up to the time of the Arabs, and even to the period when the first universities were founded. Montpellier and Paris became in France the most celebrated and principal centres of medical education; they held to a sort of ornamental dogma proper to Galen and the Arabic school, one that was cultivated with care by several great men; but empiricism, though confounded in the schools with other sects, always went along as usual, although it occasioned many disputes.

We find proof of these disputes—that is to say, the efforts that dogmatic scholastics made to entirely abolish empiricism—in the works of Riolan the father, a Paris physician. He dedicated one of his books to the Parliament of Paris, and exclaims: “Up to what point will you suffer empirics to walk with heads up in the midst of this capital, that they infest with their bad medical practices?”

This author reviews in a few words all the reproaches made against empirics in former times; no one answered him. If he had found some famous empiric he might have discussed further. In fact, he carried his passion for the dogma of his school to an advanced point; he said he “loved better to be deceived by Galen than to follow a good road with Paracelsus, whom I regard as one inspired by the Devil.” It was felt that such a hothead gave many advantages to these he antagonized.

The Parliament of Paris listened to

these clamors; they knew how to value such zeal, and took no notice of it; the empirics still practiced in Paris and throughout the country. Many felt the necessity of bewailing medical abuses and excesses, no less terribly than did Riolan and his immediate followers. There were many of the most distinguished men of the Faculty who could not renounce empiricism in the treatment of disease. One has only to open the works of Hauliers, Duret and of Baillon to be convinced of this; therein will be found the cure of maladies by remedies purely and simply empirical.

The kings always paying attention to the happiness of their subjects purchased on numerous occasions secret empirical remedies, so that all the world might use them. The list of these remedies is very large. The French kings also established a royal medical commission, of which their first physician was always the head. This commission, that lasted for ages, was destined to collect and examine empirical remedies, and choose the most agreeable and useful ones. This was evidently a necessary resource for empiricism, that the medical schools fought so strongly. It was from this kind of academy or tribunal, where the schools could not be induced to try new remedies, as do the majority of doctors who practice medicine in our day, that mercury, tartar emetic, neutral salts, quinine, ipecac, and many, many others were finally forced on the dogmatic physicians behind their intrenchments. Yet they have become accustomed to believe that the discovery of these remedies belongs to them.

Inoculation for small-pox had its origin in the same source as all these remedies, among the common people, in domestic practice, among old women in quiet households. Lady Montaignu saw this operation at Constantinople; she had the courage to try it on her children. She introduced inoculation into England, where it was tried on in good faith; there it passed rapidly from one hand to another, precisely as the empirics practice.

It appears evident that doctors who held to the empirical sect and followed

its principles exactly, watching the progress of the remedy, could not be prevented from practicing inoculation; or at least they must tolerate it if not advise it. One of the great principles of the empirics was always to report cases to all honest practitioners when assured of a fact; here the slight danger from inoculation was published by a thousand mouths. Its dangers were proven to be much less than its advantages.

Besides, this practice, which was purely empirical, was reinforced by the opinions of many great foreign physicians. So those in France could not be prevented from trying the new method of small-pox prevention, if only to give a formal contradiction to all the partisans of the method; now they were in much larger numbers and had more weight with the public than those who protected the good name of cinchona and other before-mentioned medicines.

So inoculation only serves to demonstrate what Hippocrates remarked with so much wisdom, that it is the art of adding little by little that daily enriches new discoveries, and that they only reach their height of perfection after a great number of generations. Hippocrates, in speaking thus, seems to paint an empiricism that prospers without cessation, without ceasing to work for new remedial discoveries.

We might recklessly conclude that Hippocrates would have admitted inoculation, or rather he might have made it as heinous a fault as that committed when he forbade his disciples to use the cutting operations; if they had believed his word lithotomy would never have reached the perfection it has obtained at the present day. If we are to believe the enemies of inoculation, they opposed it, for the same reasons as many other important discoveries, that were adopted little by little.

[THE END.]

THE injection of a glass syringe of lemon juice into the nose, after it has been cleansed of clots, will stop bleeding after everything else has failed.—*Med. Summary.*

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of January 18, 1898.

The President, W. E. KIELY, M.D.,
in the Chair.

W. EDWARDS SCHENCK, M.D., Secretary.

[TELEPHONE NO. 1981.]

DR. ALBERT H. FREIBERG read a paper entitled

Innovations in the Treatment of Pott's Disease (see p. 151).

DISCUSSION.

DR. MERRILL RICKETTS: This paper is an excellent *resumé* of the subject as presented by Mr. Tubby and Jones (*British Med. Journal*, November 20, 1897), Mr. Murry (December 7, 1897), and the various reports from the Moscow meeting.

I am much surprised at the gentleman condemning a procedure which has been followed by so many good results, especially when they have been in the hands of so many different operators—more especially as the mortality is so insignificant. The consequences are practically *nil*, as shown in the six hundred cases, out of which there were but three cases of paralysis within the first few weeks. Jones' mortality was but two out of three hundred cases.

Nearly all of this work has been done since August, 1896, and there seems much to be accomplished in doing it. Surely, it should be done in cases where the circulation, respiration, digestion, pain, etc., are involved; also in cases of paralysis resulting from the deformity. As a means of cosmifying I can see where it should be demanded in many cases. Surely, there are many who feel keenly such a defect, and realize that it is even their duty to make as presentable an appearance as possible. Deformities are corrected in other parts of the body for this purpose, and why not this? Grattin, with his osteoclast, had but two deaths in 206

subcutaneous fractures of the long bones.

Now as to the third conclusion: The reduction of a quick curve is more likely to injure the cord than the reduction of one not so quick; that is, those curvatures involving two, three or more vertebræ are more easily reduced and with less likelihood of injuring the cord than where fewer vertebræ are involved. One operator has made or suggested that the curvature could be reduced by means of an anterior incision through the abdominal wall, and I see no special reason why it should not be done in certain cases.

DR. J. C. OLIVER: I desire to commend the essayist for introducing a new treatment that he does not enthusiastically recommend.

DR. G. B. ORR: I compliment the essayist upon giving us such an excellent paper, and am not surprised that it has not had more of a discussion, for the simple reason that his paper is so complete and has covered the subject so thoroughly that there is nothing much left to discuss.

As he has justly said, there are but two classes of cases in this disease in which anything can be done, viz., the first and second stages. When we have an ankylosis we cannot do anything, because there has been a destruction of the body of the vertebra affected, and nature has kindly united its unaffected fellows and thus strengthened this defective section. Probably I can safely say that only in the first stage can we expect to accomplish much with this measure.

I have manipulated a number of spines, and it has surprised me to note how firm these ankylosed ones become. Thirty years ago my old teacher, Blackman, said that ankylosis was the desirable consideration, and that we should let it alone when it occurs. I have seen no reason to want to change his statement.

One death in twenty-five cases is quoted by Drs. Tubby and Jones, of Liverpool, which I think is the latest contribution to this subject, from which we note that the mortality is greater than the paper would lead us to believe.

The profession felt greatly indebted to Sayre for his treatment, and are

again placed under obligations to Calot. The essential difference between the treatment after Sayre or Calot is that Sayre was satisfied with extension and fixation, whereas Calot extends and makes forcible pressure upon the protruding portion of the spine to such a degree that there is a *depression* in the spine, instead of a hump; and this procedure is to be repeated as many times as necessary until you have a symmetrical spine, and all diseased action arrested. We must accept the clinical and pathological conclusions of Calot to be correct until time decides him wrong.

DR. PHILIP ZENNER: I must express the same opinion as Dr. Oliver, that we are indebted to the essayist not only for his admirable presentation of the subject, but also for the conservative tone of his paper. It certainly will require time to show whether this measure has any real value, not only that it may be tried in other cases, but further time is necessary to reveal how much good the measure has done in cases to which it has already been applied.

As to its benefit in paralysis, it must not be forgotten that the vast majority of cases of paralysis from Pott's disease get well without this treatment.

As to the nature of this paralysis, at one time it was supposed to be due to pressure upon the cord. Then, as the inflammation of meninges and cord were observed, the idea of pressure-paralysis seemed untenable. And yet this mechanical factor probably plays some part. It is sometimes observed that there is myelitis whilst the pia is yet unaffected, so that the inflammation did not extend directly by contiguity from bone and meninges to cord. Here it is likely the pressure caused damming of the lymph channels, and hence inflammation of the cord. In the case of remarkable improvement of the paralysis immediately following the operation, reported in the paper, it is probable that the change was due to the removal of such pressure.

DR. S. P. KRAMER: In considering the plausibility of this method one should not fail to consider whether it is for cosmetic effect or a therapeutic

measure. If the former no one is justified in subjecting them to the risk, while if for the latter it puts it in a different light.

It is known that thickening of the dura often is the cause of paraplegia, so by breaking up this condition we may release this pressure on the cord. The breaking up of tuberculous tissue may be attended with some danger. Increased blood supply should be disastrous to tubercle bacilli.

With the Calot treatment the reduction is more apparent than really exists, because of the compensatory curve that occurs in other parts of the spine.

One objection that cannot be urged too strongly is not to attempt this measure in cases where there is pulmonary tuberculosis.

DR. JOSEPH RANSOHOFF: I have very little to say, as I have had no experience with the method, so that discussion of it will be only from a theoretical point.

Paralysis in Pott's disease is quite a common occurrence, and it is often known to have disappeared after an ordinary plaster jacket had been applied. I have found it quite difficult to tell from the position of the gibbus the amount of diseased area on the anterior part of the column, and I would be glad if the essayist, in closing, would tell us how by the character of the gibbus and its angle he is able to tell the extent of the disease of the vertebræ, and to what extent the articular processes are affected.

We all know that this disease may remain quiet for years, as we often see it in the knee-joint, and then suddenly break out again, from which it is probable to occur elsewhere in the body.

The statistics of this operative procedure are remarkable, but 5 per cent. to 10 per cent. mortality would not be too high if we can cure Pott's disease, because we know that 10 per cent. so affected die, so that this small per cent. should not deter us from resorting to the measure. Theoretically I cannot conceive that this plan of treatment promises very much, for we know that where we have a fractured spine it is most difficult to repair. Tubercular

3 per cent. and 4 per cent., and therefore tissue is not readily repaired, and the remission that occurs in the spine as a result of this disease nature tries to bridge over by allowing the unaffected vertebræ to fall together and become united, thus restoring the column; but with this method this is broken up and a hiatus occurs that I doubt can be filled up.

It has been said that skiagraph tracings show new bone formation. I would like to see a number of such tracings before I could accept that the periosteum would develop so much bone. I have more than once seen the spread of tuberculosis from the stretching of a tubercular joint, and often it does not take six months for it to do so. I cannot see but what this measure would favor the development of general tuberculosis. These Pott's disease cases are shorter in stature than normal man.

This subject has been fairly presented. It is still *sub judice*, and must be left to time as the final arbiter.

DR. FREIBERG: In approaching a subject as new as this conservatism is identical with honesty. I did not wish to advocate any particular treatment, but simply to discuss the experience of others with this treatment that we might come to our own conclusions.

Concerning the reference made to Tubby and Jones, I have found from them simply a report of eleven cases, preliminary only, and accompanied by no discussion of the subject.

Reference has been made to the number of vertebræ concerned, and it has even been suggested that an acute angle involving but one or two vertebræ formed a greater menace to the cord during reduction than an obtuse one involving a number of vertebræ. I believe that it has been sufficiently shown that these conditions have little or nothing to do with injury to the cord, and the reason for considering involvement of a number of vertebræ as contra-indicating reduction is on account of the great diastasis which must inevitably result under these circumstances and make unlikely the filling up of the hiatus.

Regarding the mortality of the operation, it is probably at present between

fore not altogether inconsiderable as a direct and immediate result of our interference.

Regarding the effect of Calot's operation in paralytic cases, the evidence furnished by the literature is certainly important. That in the vast majority of cases the paralysis of spondylitis disappears spontaneously is known to us all, but that a considerable number of cases remain where this fails to occur is shown by the number of laminectomies and other operations upon the spine made by men of the highest repute for this purpose. Péan's case, where paraplegia resisting mechanical treatment and recumbency for two years cleared up within a week after reduction, bears a testimony that is not equivocal. This might also be said of other similar cases reported.

The amount of fixation and ankylosis I believe is best determined by well-guided and cautious attempts at reduction; that even this is not accurate I am aware, the compensatory changes in the normal parts of the column being responsible. Likewise do I well know the impossibility of determining the extent of the tuberculous disease *intra-vitem*. I have spoken of this in my paper. I do not believe any classification is feasible according to the degree or firmness of ankylosis.

Regarding what has been said concerning the formation of new bone in the presence of tuberculous disease, I am aware that this does not occur in the height of its activity. That it does occur afterwards is shown by the number of firm bony ankyloses which we all see as its sequel.

Calot, by bringing about an immediate and complete fixation of the spine, by relieving it entirely of superincumbent weight and by preventing further effects of pressure upon the diseased vertebræ, hopes that the tuberculous process will be sooner brought to a finish, and that ankylosis in the corrected position may occur much sooner than would otherwise be the case.

Regarding the results of skiagraphy, I must acknowledge myself skeptical in the extreme. I hope that I shall prove mistaken in my opinions on this subject.

Correspondence.

THE FREE HOSPITAL—AN INSTANCE.

WASHINGTON, February 5, 1898.

In Washington we have erected a memorial to James A. Garfield, and its glory is that it dispenses absolutely free of all charge.

Last August a nineteen-year-old young man, just commencing to tramp, left a good home in western Pennsylvania, and while seeing this city was willing to set type. I employed him. After about three weeks' work he felt unwell and was told about the Garfield Hospital. He walked out there and told his story, was taken in, and although in twenty-four hours he was as well as a good many people who do work, they told me that they wished to keep him till he was thoroughly strong. They said there was malaria in his system. He stayed two weeks and walked back as he had gone—penniless both ways. He returned to work for about two weeks, during which time he bought a suit of clothes on the installment plan, paying one-tenth the price down. He bought other articles on credit on the strength of his employment. He then left town between Saturday and Monday. He never thanked the Garfield Hospital nor felt any obligation to it so far as I could discover. He reasoned: "Why should not I take what falls in my way as a bird takes what it sees, regardless of supposed human ownership?" He has gone on to forage in other fields. I shall hereafter be slow to hire strange boys, though this bridge carried me so safe over that I could have given him a pretty good letter of recommendation so far as his dealings with me went.

But are these free institutions a public good? That they cut the doctors out of practice need not be considered. Let the doctors take care of themselves. But how about injuring the public morality? How about creating dead-beats and paupers? That is worth considering.

CHAS. W. SMILEY,

Editor "Microscopical Journal."

THE
Cincinnati Lancet-Clinic.


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DR. J. C. CULBERTSON,
317 W. SEVENTH ST., CINCINNATI, O.

CINCINNATI, FEBRUARY 12, 1898.

Editorial.

AN INFLUENCE OF THE LAW.

At the last meeting of the Academy of Medicine of Cincinnati Dr. C. A. L. Reed made a report of the workings of the Ohio medical law that was of very great interest to all physicians. He showed that the work of registration alone caused a disappearance from the medical profession of nine hundred and sixty unqualified physicians. These men did not all leave the State, but they did quit practicing medicine; most of them entirely disappeared. Seven thousand four hundred were qualified to register, showing about one in eight to have been unqualified, which is an enormous percentage.

In Hamilton County, with nearly eight hundred practitioners, eighty-four were found to be disqualified, of whom more than fifty have disappeared, twenty-four are under indictment, and the county prosecutor begs the board to hold up with its prosecutions because of his crowded docket.

This showing is splendid, and indi-

cates that all statements of the large number of unqualified men in Ohio were not exaggerated. The writer does not remember to have ever heard that one-tenth of all were unqualified; the showing of one in eight is really appalling. The law was enacted none too soon, and its enforcement has been reasonably vigorous.

Another satisfactory statement made by Dr. Reed was a declaring by the Supreme Court of the State that every part of the law is constitutional.

The board has issued an official register of the physicians of the State that is of great utility.

THE KENTUCKY STATE BOARD OF HEALTH

has just issued its biennial report for 1896-97, in which is to be found an official register of all the physicians in the State, the laws and court decisions.

It is exceedingly gratifying to observe that the courts of the State have upheld the laws, declaring them and the acts of the board constitutional; also that the Governors of both Kentucky and Ohio have by their acts upheld the work and decisions of the boards in every instance.

Honorable, reputable medicine based upon educational standards, has been vindicated and is now in the front row.

Kentucky is a step in advance of Ohio in its expurgation of the disreputable advertisements of quack practitioners. The board declared "osteopathy" as a system of medicine to be the *ultima thule* of absurdity and the *ne plus ultra* of fraud, and that its graduates should not be permitted under the guise of doctors to impose upon the good people of our old "Kentucky Home." The secretary was instructed

to issue no certificate based on diplomas from colleges located in any foreign country.

The report contains nearly if not quite all of the court decisions in the various States, which makes it particularly valuable as a book of reference.

The work of the board in stamping out and eradicating contagious diseases has been very effective.

Medical advertisers have been completely driven out of the State of Kentucky. It is possible to so amend the Ohio and other State medical laws as to make them equally effective.

THE INDIANA LAW

is almost identical with that of Ohio, but has only recently gone into effect. Another year will show an exodus of unqualified practitioners proportionate with that which has taken place in Ohio.

West Virginia led the advance along these lines, and to the people of that State should go the honor and glory for their action in this direction. The case of Dent, appealed to the Supreme Court of the United States, has been a bulwark that has proven impregnable and stands high as a beacon light, beckoning the legislatures of all of the States to step forward in the path of intelligence, reputability and plain honesty.

The Ohio and Indiana laws may be made nearly perfect by a very few Kentucky amendments.

One additional consideration should be thought of, and that is a requirement of all future graduates from medical colleges that they shall appear before the State board for examination before being permitted to register as practitioners of medicine. The desirability of such action is given out for consideration.

MARRIAGE LAWS.

Last week Representative Parker introduced a bill in the Ohio Legislature which has for its purpose a regulation of marriage which is of very great import to the people of not only this State, but its enactment into a law and reasonable enforcement would surely be followed by similar enactments in other States.

The bill provides that all persons seeking marriage license shall be examined by a board of three physicians, to be appointed by each county Probate Judge, who shall examine such persons to see that they are free from insanity, dipsomania, tuberculosis, cancer, venereal and other hereditary diseases, and are not criminals.

The bill is a reasonable and just one, and represents a sentiment already expressed in the pages of this journal. That such a law would be productive of great good, reduce suffering and mortality rates there can be no question. Modern medical science has attained such a degree of perfection as to warrant such measures.

There is a sentiment of love, of affection and of affinity which is worthy of a first consideration always, but it should not be forgotten that the instinct of procreation is dominating in man, and only second in power of control over the individual to that of self-preservation. This instinct is a passion, and not the voice of love, although one is often mistaken for the other.

The standard of the State in such affairs, and as intimated in this bill, is the normal man and woman, because it is only the normal man and woman that should beget and produce their similars. There is no law of nature more certain or more clearly taught in the Bible than that like produces like. Tares do not

produce wheat, nor are figs gathered from thistles. Hybrids like the mule are unproductive of progeny. Even a miscegenation of races results in a deterioration and degeneration of vitality to such an extent that extinction follows.

The nation wants normal men and women in order to be strong and powerful, and just in proportion with the admixture of degenerates and defectives will there be a weakening of the strength of the State.

The degenerates referred to in the Parker bill are usually not self-supporting. The insane and those who have been insane are an enormous expense to the State, entailing care of a most expensive kind, and their progeny are always neurotics. Drunkards frequently marry, and their progeny are likely to be criminals, prostitutes, and always neurotics. Tuberculous people reproduce their kind in a progeny having a predisposition to that or other maladies against which they have little or no resisting power. Cancer indicates the presence of a weak resisting power to attacks of the disease. Syphilis is hereditary beyond question, and the progeny of those suffering with the disease are to be cared for as physical degenerates, and are an element of weakness to the State. Gonorrhea is now thought to be seldom cured, and is a threat of terrible suffering to the woman who has sexual relations with the man who has at any time in his life been a sufferer from the disease. Gonorrhea alone has been a justification for the specialty of gynecology in medicine and surgery. Pus-tubes and gonorrhea are generally regarded by gynecologists as synonymous terms, and often involve capital operations and asexualization as the price of a life. Nephritis is often traceable to a gonorrhea. Cardiac disease, pleuritis and rheumatism of an obstinate

and intractable character are among the sequelæ of gonorrhea. Criminals beget their kind always.

In the face of an arraignment like this, which every physician knows is not exaggerated in the least, and with a knowledge that representatives of every class named marry and are given in marriage without discrimination or protest upon the part of any one, it is evident that the Parker bill should become a law.

Families are often interested in such marriages in order to shift the care and expense of one of its degenerate scions.

It is quite well known that societies of women in Paris and in some other places have determined to require of those seeking marital alliances certificates of health, and particularly of a freedom from venereal diseases. And why not? They are justified by the superior instinct of self-preservation to take just such measures.

In fact, this dominating instinct of self-preservation impels a consideration of the enactment of the Parker bill. Some amendments to the bill have been suggested, such as requiring that one of the medical examiners shall be a female physician, which is commendable, and to which Mr. Parker will offer no objection.

It may possibly be claimed that the degenerates named in the bill are not all criminals, and should not be treated as such by an abridgment of their personal rights. Right in here comes the superior and dominating instinct upon the part of the State—self-preservation. The State is but an aggregate of individuals to constitute its body politic, and just in proportion to the mental, physical and moral strength of its citizens will the State be strong.

As to criminals, those of this class who are criminals through defective or

degenerate conditions of their minds are never reformed. They may not be guilty of violations of the law and may lead lives of useful citizens, but there being a congenital or acquired defect in the moral attributes of their minds, are liable to be guilty of yielding to an impulse, to a temptation at the slightest provocation; when they yield there is no following of genuine remorse or repentance, but their detection is regarded by them as a misfortune only. Such persons should at all times be under the special surveillance and discipline of the State. They are always dangerous citizens, always unreliable. The State cannot give them what they have not got—a moral mental attribute. It can give them discipline and support, but cannot give them a single new brain cell from which an honest or honorable emotion may be evolved. These people ought not to be permitted by the State to marry, or, without marriage, to propagate their kind.

Man and his representative, the State, makes no mistake when lending a helping hand to nature's unalterable law, which so tersely finds expression in—a survival of the fittest.

THE TELEPHONE.

The introduction of a bill in the Ohio Legislature having for its purpose a reduction of rate of telephone charges is one in which every local physician is directly interested. That the rates charged are excessive and need revision is patent to every one. The Telephone Company, however, is aroused, and has sent blank petitions to all subscribers asking them to assist in sustaining the present tariff, and making a claim that the bill means confiscation—a claim that is simply preposterous and unjustifiable. The company, at its

own sweet will, when suited, did not hesitate to send its men into, through and upon any building, private or public, for the purpose of stringing its wires. Arrogance is no name for their presumptions. Their assessments are shown to be entirely too high through the dividends declared and reported unreasonable salaries paid. Superior service should command and have superior compensation, but there is a limit to that which may be regarded as reasonable, where the unreasonable begins.

Last Monday evening, at the Academy of Medicine, a motion made to endorse the petition sent in by the company was negatived by an almost unanimous vote. That the company does give a fairly good service is not questioned, but no better than in other cities where the rate charged is much less. A corporation exercising the right of eminent domain should be regulated in its privileges and charges. Capital so invested is entitled to a small margin over the value of money in the loan market, or legal rate, but not to double such rates; nor should compensation to officers and employes be excessive. In these relations the Telephone Company has not a good defense against reduction of rates to subscribers. This feeling certainly manifested itself in the Academy of Medicine after the least bit of debate upon the part of members.

The Telephone Company declines to make the house of a physician the same rate as to another resident, but classes his home as a place of business, and charges accordingly. In this relation it may be said that the telephone has been a very great source of detriment to the business of physicians. Consultations over telephones pertaining to the sick are frequent, and nearly always at the expense of the doctor.

There is the saving of a professional visit or office call to the doctor's patron, and corresponding loss of call to the physician. This is a very material something to every practitioner who rents a telephone.

The world do move. The telephone is in the procession and cannot be crowded out, but it should be made as little of a tax upon the resources of physicians as possible. The pharmacists are in the same grievance boat with the doctors, and between them it is possible some relief may be obtained from the Ohio Legislature.

PUBLISHER'S DEPARTMENT.

A PRACTICAL course in operative surgery on the cadaver will be given by Dr. Horace J. Whitacre at the Medical College of Ohio, beginning Wednesday, February 16, and continuing six weeks.

The course is intended for students and practitioners of medicine, and will cover (1) all types of bandages, splints and dressings; (2) the diagnosis and reduction of artificially produced dislocations and fractures; (3) all operations of general and special surgery, including amputations, the ligation of arteries, with special attention to the minor operations of every-day work; (4) strict aseptic and antiseptic principles which will be applied in the operations.

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"The work is concise, practical and in accord with the most recent advances in neurological science." F. W. LANGDON, M.D."

February 8, 1898.

A PERFECT CO-ADJUVANT.—Physicians should not forget that no matter what their preference may be as to the form in which

milk should be used for their patients and the babies under their care, whether it is modified, sterilized, Pasteurized, peptonized, treated by some other method, or natural, they can always depend on the perfect co-adjuvancy of that unrivalled dietetic preparation, Imperial Granum. Many years of successful clinical experience having proved this combination of nutriments to be acceptable to the palate and also to the most delicate stomach at all periods of life, being in many cases retained and assimilated when everything else is rejected, though in very extreme cases the Imperial Granum is often prepared with pure water only.

SANMETTO A STANDARD REMEDY IN GENITO-URINARY DISEASES.—I have prescribed Sanmetto in a large number of cases of genito-urinary diseases during the last four years, and with uniformly good success. In prostatic troubles of old men, with difficult micturition, it acts like a charm. In cases of irritable bladder, with incontinence of urine, I have never met with any remedy that acts so well. I prescribe it frequently, and shall continue to do so, as I look upon it as a standard remedy.
J. F. SUYDAM, M.D.,
Alma, Mich.

BRUCE WALLACE, M.D., one of the leading practitioners in Houston, Texas, makes the following statement, which is of particular interest at this season:

For the first time in my professional career I feel it incumbent upon me to give expression in favor of a proprietary preparation. This voluntary departure on my part is the result of close observation and study. For many years the host of remedies recommended for diseases of the chest have proved disappointing in my hands. You may therefore understand with what satisfaction I welcomed the almost magical therapeutic results of "Malto-Yerbine" in pulmonary troubles. Only a few days ago it was my good fortune to be able to relieve, in a most remarkably short time, the many harassing symptoms of a case of laryngeal phthisis with "Malto-Yerbine" in small doses frequently repeated. In just such cases relief means everything to the poor afflicted creature coughing and expectorating continuously. In coughs and colds of the ordinary type a few doses of "Malto-Yerbine" will cause the symptoms to disappear like mist before the rising sun. It is my earnest hope that physicians unacquainted with the value of "Malto-Yerbine" will give this preparation a faithful trial in all diseases of the lungs and air-passages. An experience of many brilliant results and no failure in the most distressing conditions with "Malto-Yerbine" constrains me to say unhesitatingly it is a *sine qua non*. If this sincere statement of mine extolling the virtues of this remedy, be the means of alleviating the torture and staying the ravages of the disease my object shall have been accomplished and my satisfaction be complete.

BRUCE WALLACE, M.D.,
Houston, Texas.

Selections.

FROM CURRENT MEDICAL LITERATURE.

The Significance of Varicocele.

Of the many ills that human flesh is heir to, it is not always the most severe from a medical or surgical standpoint that produces the greatest amount of mental distress in the patient. It is a well-known fact that the functional trouble of the heart from a deranged digestive system is an object of far more solicitude to its possessor than an organic lesion of that organ. Probably nothing can so tax the skill, patience and religion of a physician as the successful treatment of that intangible disease so frequently dismissed as "only neurasthenia." In the field of genito-urinary surgery, sexual neurasthenia is the *bête noire*. Its victim is happiest when he is miserable, and the discovery of a varicocele which he can make a scape-goat for his long train of symptoms is an occasion of much inward rejoicing.

However, to be successful in treatment we must be accurate in diagnosis, and instead of incredulously smiling at the impossible complaints a patient may ascribe to a varicocele, a more careful examination into his physical, as well as mental, condition should be made.

In discussing the significance of varicocele, we must consider the anatomy of the veins involved and the conditions which bring about the pathological change. Three sets of veins drain the testicle of its blood. One springs from the rete testis and the tubules, another from the vascular layer of the tunica albuginea, and the third from the lower extremity of the vas deferens. These sets intercommunicate and finally coalesce into one vein, the spermatic, which, on the left side, usually empties into the left renal vein, and on the right side into the inferior vena cava. The right spermatic vein is shorter than the left, and enters the vena cava in the direction of its blood current. It is supposed by Dr. Brinton, of Phila-

delphia, to be more effectually equipped with valves than the left vein, though this is a mooted point. The left spermatic vein empties into the left renal at a right angle, which tends to produce backward pressure on the column of blood. The left testicle hangs lower than the right and is heavier. The left spermatic vein is frequently pressed upon by the distended sigmoid flexure of the colon, a condition usually found in constipation. These facts show why varicocele is ten times more frequent on the left side than on the right.

This disease of the spermatic veins usually occurs in young men, especially near the age of puberty. When a patient of this age presents himself, the varicocele may usually be ascribed to something that induces frequent or chronic hyperemia—active or passive, though usually the latter. Prominent among the causes of this condition are a constant standing position, constipation, a weak general circulation of the blood, and excessive venery or masturbation. What worries this class of patients most, however, is fear of permanent injury to the testicle.

It is generally conceded by surgeons that a slight varicocele on the left side cannot of itself produce any organic injury to the testicle. On the other hand, it is equally true that a large varicocele will injure the testicle because the chronic passive hyperemia will eventually produce destruction of the testicular parenchyma and formation of connective tissue just as in other organs of the body. But the border line between these two classes of cases is hard to define. Mr. Curling reports two cases illustrative of the latter class. One was a man, aged twenty-nine, of moderately robust health, with a double varicocele. Both testicles were small and soft. He would have strong sexual feelings and emissions, but the semen was destitute of spermatozoa. The second case was a man, thirty-eight years of age, of weak sexual powers, whose right spermatic duct had been blocked up after epididymitis, which was followed by softening of the right testicle. The left testicle had been unaffected by epididymitis, but on this

side the patient had a varicocele. His seminal fluid contained no spermatozoa.

When varicocele occurs in the middle aged or in the old, which is rare, it usually occurs as a symptom of some grave pathological condition. Most frequently in these cases it is the result of pressure on the spermatic veins or on some of the veins into which the spermatic empty. A tumor, as an aneurism, or some malignant growth, is usually found to produce this pressure.

But there is also another condition which has recently been noted by M. Legueu (*Journal des praticiens*, November 13, 1897), and which is exceedingly important in this class of cases. A patient presented himself to M. Legueu having the symptoms of a tumor of the left kidney, a left varicocele also being present. He operated and found the spleen very much enlarged. The patient died and a necropsy showed the left kidney to have only a small cancerous nodule. The left spermatic vein, however, was compressed by enlarged lymphatic glands that had become secondarily infiltrated with cancerous cells.

This would seem to show that a varicocele on the left side, when a cancerous growth is present in the left lumbar region, indicates the probability of secondary infection of the lymphatic glands and renders the prognosis in operative interference accordingly grave.—*N. Y. Polyclinic.*

Hydrozone and Glycozone in the Treatment of Gonorrhea.

To the Editor of the New York Medical Journal:

SIR: My attention has been attracted to an article published in your journal for July 3, by Dr. J. A. Silverman, of Butte, Montana. The writer states that no antiseptic has been discovered that will destroy the gonococcus without doing injury to the mucous membrane. As I presume that he is open to conviction, I submit to you for publication the following report of cases which I have successfully treated during the last few months with hydrozone and glycozone, which I consider not only harmless but the most powerful

healing agents that I have ever used in my practice of thirty-five years.

CASE I.—A man called on me on June 20, with gonorrhea of four weeks' duration, with profuse discharge, micturition painful, and an acute burning sensation along the entire urethral tract. Pus sacs had formed in the canal, the meatus was inflamed, and the gonococcus was active, as determined by microscopical examination. I prescribed injections of one part of hydrozone and ten parts of sterilized lukewarm water, an ounce for each injection, four times daily. After two days I reduced the proportion to one part of hydrozone and fifteen parts of lukewarm water, and I directed glycozone mixed with an equal amount of glycerine pure to be injected on his going to bed. The diet was not restricted, but no stimulants were permitted. In two days no gonococcus could be detected. The discharge was lessened, the pain and difficulty in micturition had ceased, and in twelve days the patient was well. Continence was imposed for two weeks. Doses of bromide of potassium and bicarbonate of sodium were administered from time to time in order to make the urine alkaline and quiet the patient.

CASE II.—A married man had contracted blennorrhea from a woman who had the whites. The same treatment was ordered, and with such satisfaction that the woman also was brought for examination and treatment. Result, a cure in each case within three weeks.

CASE III.—A man, fifty years old, contracted gonorrhea from a woman of the town. As the patient lived in the country, twenty miles out, no treatment was given until ten days after infection. Aggravated symptoms of gonorrhea were present, and there was chordee every night; the patient, to use his own expression, was "plumb wild." The hydrozone injections were ordered, one part to twenty, owing to the great sensitiveness of the urethra and the possibility of orchitis if a stronger injection was used, as there was a slight swelling of the testicles. The glycozone, diluted with equal parts of pure glycerine, was ordered at night. I also gave glycozone internally in medicinal doses, to allay a

gastric disturbance due to nervousness. In this case the treatment was continued for twenty-five days. I sent my patient to his cattle ranch happy.

WARREN E. DAY, M. D.
Prescott, Arizona, August 16, 1867.

Some More Facts in Regard to Dispensaries.

That so-called medical charity as it is bestowed in the various hospitals and dispensaries is very grossly abused may be a well-known fact, but to what enormous proportions this abuse has grown, because no effectual means have ever been taken to correct it, may be a revelation to our readers and prove to those who have been affected by such a condition of affairs the necessity of correcting an evil which goes on in open defiance of all laws of ordinary decency and fair play. While there ought to be no objection to the dispensary and hospital, if confined to the gratuitous treatment of the really helpless sufferer, medical charity becomes a farce and a halt ought to be called when the main object for which it was established is misconstrued, when absolutely no discrimination is made, but all applying are treated free of charge, when these institutions are merely upheld for the purpose of increased clinical opportunities, of free advertisement for the promoters or for their professional advancement. The reason why a great number of physicians are now struggling along and barely making enough to keep body and soul together, and why pharmacists are complaining about the gradual but considerable drop in their prescription business, may be gleaned from the following facts, gathered from reliable sources, and, therefore, trustworthy. Free medical advice has been dished out in Cincinnati as follows the past year:

Daily average patients.

Cincinnati Hospital	340
Lick Run Hospital	225
Betts Street Hospital	175
Ohio Medical College	75
Miami Medical College	60
Pulte Homeopathic College	40
Out-Door Poor	40
Cincinnati Medical College	35

This estimate applies only to public

institutions, and the numerous private and denominational hospitals would swell these figures considerably. As exhaustive statistical study has shown that FULLY 50 per cent. of the patients who apply for free medical aid are able to pay for such service, it does not take much of an arithmetician to estimate the loss yearly sustained by both physician and pharmacist through their neglect to take an active stand against this fraud.

Physicians are at last realizing that it is high time to arrest this rapidly-growing evil and are determined to make an attempt to urge legislative reform in the present dispensary system. We sincerely hope the pharmacists will awaken sufficiently to the necessity of helping the physicians in their endeavor to mitigate an abuse, which is doing both a great injustice and depriving them of an income to which they are lawfully entitled.—*Stein-Vogeler Drug Review*.

Aged Parents.

A woman in Toronto who is over sixty years of age gave birth on January 21 to a baby girl. Her husband, to whom she was married seven years ago, is seventy-eight years of age. The mother has been married twice, and this is her twenty-second child. The day after this, not to be outdone by any foreigner, a woman sixty-five years old, living in Oklahoma, also gave birth to a baby girl. This mother has also a number of other children, ranging in age from thirty-five to forty-five years. Some of the male sex have, as might naturally be supposed, better records than this. A Tyrolese gentleman named Parravicini, is reported to have married at the age of eighty-two years, and to have been the father of seven children, the last of whom was posthumous, his father having died at the age of one hundred and four years. Juba, king of Mauritania, is believed to have died at the age of ninety-one years, leaving a posthumous child.—*N. Y. Med. Record*.

A WINEGLASS of vinegar, it is said, will sober a very drunk person in twenty minutes.

Bibliography.

THE MEDICAL AND SURGICAL REPORT OF THE PRESBYTERIAN HOSPITAL IN THE CITY OF NEW YORK. 1897.

This yearly report of work done in a hospital devoted entirely to medicine and surgery will cause the annual publications of various other such institutions to look extremely insignificant in comparison. Bound as it is in a neat stiff-board cover, no pains have been spared to make its contents, both illustrative and descriptive, attractive. Commencing with a brief account of "Cholelithiasis and Surgery of the Bile-Ducts," the topics alternate between medicine and surgery, and include, among others, "Cold Tub-Bathing in Enteric Fever," "Malignant Endocarditis," "Pulsating Empyema," "Perforating Gastric Ulcer." The most exhaustive article in the book is "A Report of Sixty-six Cases of Appendicitis," by Forbes Hawkes, M.D. This report has been tabulated under forty-one different headings, and includes all clinical data of the slightest value from a standpoint of either etiology, symptomatology, prognosis, diagnosis, or treatment. Possibly no more complete a clinical monograph has been published on this important subject. Equally deserving of praise from a medical point of view is that entitled "Renal Tuberculosis," the illustrations of which give good macroscopic ideas of the various varieties and stages of this disease. The work concludes with a description of the operating pavilion of the hospital, and a list of the operations performed in the surgical department. M. A. B.

PROCEEDINGS OF THE MILITARY SURGEONS OF THE UNITED STATES.

Edited by J. E. PILCHER, M.D. Vol. VII, 1897.

While on the subject of reports, it might be well to speak a few words concerning "The Proceedings of the Military Surgeons of the United States."

Military surgery and surgeons have always been looked upon by line officers

and physicians in private life with a feeling something like contempt; by the former on account of the non-combatant character assumed by the surgeon, by the latter because they look on the army medical man as a creature who makes no pretence of making any progress in his profession. That out of the 162 Victoria Cross holding officers of the British Army, 13 are surgeons, is rather a backset for the holders of the former stand. This (and previous volumes) will do something toward disproving the latter. To be sure, the State organizations are represented, but, in this work, leaving out their contributions, a book of considerable size would remain, the product of the regular army.

After dealing with the regular routine business, the purely medical portion begins with Chapter V, "Naval Medicine, Surgery and Hygiene;" Chapter VI treats of "Military Personal Identification," a kind of medical Bertillon system. The remaining eleven chapters, as they are called, though in reality each is a section containing from three to six different papers, discuss *pro* and *con* almost every phase of naval and military medical education. The members of the association may well be proud of their "American Text-Book of Military Medicine."

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Original Articles.

**OSSIFICATION OF THE
CHOROID.¹**

BY DAVID DUBECK, SC.B., M.D.,
CINCINNATI.

Choroiditis ossificans—or, a better term, ossification of the choroid—is one of the most interesting of the ocular pathological phenomena. This is not due to its extreme rarity—for many cases are on record, dating back several decades—but to the striking beauty of the microscopical sections, and the rather inexplicable character of the pathological process. The general considerations may best be preceded by the clinical report of a case.

William F——, aged fifty-nine. Was first seen in the spring of 1895. There was a painful attack of irido-choroiditis in an old atrophic eyeball, left side, with a fresh hemorrhage into the anterior chamber. The history was as follows: About twenty-one years before he had had a bit of steel driven into this eyeball from the nasal side. He was treated by Dr. Williams, and the eye quieted down and remained quiescent for about a year. Then the eye became inflamed, and a sharp angle of the bit of metal presented in the lower nasal segment. The piece was extracted by Dr. Ayres. The patient describes it as "thin as a wafer, and three-eighths of an inch long." The eye soon quieted down, and remained so during all of these intervening years, up to the outbreak of this present attack of acute irido-cyclo-choroiditis. It again soon quieted down under atropine and hot douches.

In July, 1897, he returned with a recurrent attack of irido-cyclo-choroiditis, of extremely painful type. There was ominous sympathetic irritation, and he was peremptorily advised to permit an immediate enucleation. The eyeball was removed July 24 under chloroform narcosis. Subsequent recovery was uneventful, the sympathetic irritation promptly subsiding.

Even in opening the eyeball before placing it in Mueller's fluid, a hard substance was encountered, on which my small scalpel could make no impress. Later the incision was run around the globe, and when one-half was lifted away it was seen that the whole posterior cavity of the eyeball was occupied by a complete bony cup. This is prettily shown in the specimen. The cup is *complete*, the opening for the nerve being much constricted, the nerve having almost disappeared from atrophy. The anterior edge, or brim of the cup, is quite irregular, at places reaching slightly beyond the equator, and at other points not quite to it. The cup is covered with what remains of the choroid and the lamina fusca. From its rim the atrophied choroid and ciliary body reach forward in a thin membrane. The cup was filled with the fluidified vitreous, through the centre of which passed the column made up of the completely detached retina. The lens is completely atrophic and shrunken.

Ossification of the choroid has been recognized from almost the very beginning of the scientific study of pathology and ophthalmology. Voigtel (1804), Merkel (1812), Otto (1813), Wardrop (1818), and Schön (1828), describe cases of bony formation within the eyeball. So much uncertainty, however, rested upon the older cases, as to whether they were really cases of true

¹ Read before the Academy of Medicine of Cincinnati, January 3, 1898.

ossification, or merely examples of calcareous deposit in inflammatory exudates, that Sichel (in the *Annales d'Oculistique*, 1846), and Arlt in the following year, denied the occurrence of true ossification within the eye, and regarded these as cases of calcification. Hulke (1857) was the first to describe a case of unquestionable bony formation in the choroid, but as his report appeared in a general journal (*Med. Times and Gazette*) it attracted little notice from ophthalmologists. Foerster followed (in his "Atlas der pathologischen Anatomie") with the first illustration of an accurately investigated case of ossification of the choroid with distinct concentric Haversian lamellæ. Then Pagenstecher (in *Graefe's Archiv.*, VII, 1860) published a thorough and accurate essay, giving the clinical and pathological facts in a manner to which very little really essential has been since added. The Atlas of Pagenstecher and Genth, and the Atlas of Wedl and Bock contain good and characteristic drawings.

Ossification of the choroid occurs only in old cases of phthisis bulbi of years' standing, and then preferably in cases that have been the subjects of many recurrent inflammatory attacks. Alt regards the clinical basis as a chronic parenchymatous choroiditis, with the usual inflammatory exudates that occur in this condition. These eyes are not necessarily painful, although this is usually the case. The immediate cause of removal is usually a threatening sympathetic irritation; or a prolonged recurrence of extremely painful character.

The ossification may occur in the form of a more or less complete cup, as in our case; or it may occur in the form of smaller isolated plates, one or more in number. These latter cases are probably ones that are seen earlier, it being probable that the tendency is to eventually form a complete cup if sufficient time is allowed the process.

In the cases with a complete cup, the optic-nerve opening is always much constricted, and the optic nerve at this point entirely atrophic and fibrous. Often it is little more than a thread

(well shown in the specimen). The retina is almost always detached, and usually wrapped into a strand passing through the centre of the vitreous chamber. It is often also calcareous, and in some instances has also shown the process of ossification. The atrophic lens in a few very rare instances has shown the same process. Connective tissue exudates in the vitreous occasionally show the same process, but, notwithstanding the continuity of tissue and the identity of structure, the process has never been noted in the iris.

The bony layer is usually rather uniform in thickness, being confined to the choroid, but one interesting case is reported by Wagner ("Eine Hyperostose der Chorioidea neben diffuser Verknöcherung derselben," Inaug. Diss., Halle, 1873), in which a small rounded exostosis projected from the choroidal plate into the vitreous chamber. It was 2 mm. in diameter.

The bony plate always occupies the inner layer of the choroid. Some have held that it is developed in a layer of connective tissue exudate lying between choroid and retina. A few have thought that it started in the lamina vitrea of the choroid. Knapp's view was that it started in a layer of inflammatory exudate in the chorio-capillaris, and to this view there is now general adherence.

The bone is arranged in distinctly marked Haversian lamellæ in the usual concentric arrangement. Between these are found the small, rather atypical bone-corpuscles. These are fusiform or triangular, and show fairly well-developed processes. There is an absence of very irregular cells with numerous branching processes, so that there fails the well-known characteristic picture of the rubbed-down section of dry, long bone. The thin bands, as a rule composed of but a few lamellæ, are joined with little bridges, so that there is a slight approach to the structure of cancellous or spongy bone. In these spaces is found a substance like marrow, with lymphoid cells, fat cells, crystals of margarinic acid, capillary vessels, etc. In a few instances the bony lamellæ are penetrated by small Haversian canals. The bone is limited by a membrane like

a periosteum, beneath which is found at times a crowded layer of small cells, showing the process to be still active. From it blood-vessels pass into the bone in Haversian canals. The bone is lined within by an endosteum, along which one can sometimes make out a layer of larger nucleated granular cells, which, no doubt, correspond to the osteoblasts.

The diagnosis of these cases is, as a rule, extremely difficult, and very often is impossible. In some few cases where there is a well-developed cup reaching well forward, its hard resisting edge can be made out by palpation, and in such cases the diagnosis can be made with certainty. In some other cases the extreme pain that is elicited by firm pressure upon the eyeball makes the diagnosis of ossification of the choroid very probable. But in most cases the diagnosis is only made after enucleation, and can only be so made. This, however, is of little moment, because no therapeutic measures are of any avail.

Time is not the only factor in this development. Usually such cases are found in old examples of phthisis bulbi, where there have been recurrent attacks of inflammation for many years; but a few cases have been observed where the development of bone occurred in eyes that had been injured but a comparatively short time before, in some cases as short a period as one year. Conversely, many examples of phthisis bulbi of many years' standing, with recurrent attacks of irido-cyclo-choroiditis, have been observed without a trace of this bony formation.

According to the clinical reports, some of these eyes have been removed solely on account of the severe attacks of excruciating pain, but many are reported as having been removed on account of attacks of sympathetic irritation, and in fear of impending sympathetic ophthalmia. That such a source of irritation may produce a sympathetic neurosis can be readily understood, but the mode of genesis of a true "ophthalmia migratoria" in such cases is not so easily seen. With our present views we are very much disposed to regard sympathetic ophthalmia as of septic origin, due either to the actual

migration of micro-organisms or the passage of some of their toxic products. With this bony development we can hardly necessarily associate these conditions producing sympathetic ophthalmia. In fact, we can see no necessary connection, on the assumption that it is a septic infection. If this condition is so often the cause of a sympathetic ophthalmia, as many observers hold, it is rather in favor of the older views, and rather against the newer views now generally held. Still, I do not find many cases on record in which this condition has *actually* produced sympathetic ophthalmia; the cases seem to be mainly ones of sympathetic irritation, which have been always relieved by enucleation. So far as I know, this may have been so in my case.

By far the most interesting point in this entire subject is the mode of development of the bony laminae. Physiologically, bone is developed in two ways: one where it replaces cartilage, as in the long bones; and the other where laid down in membrane, as in the flat bones of the cranium. In none of these eyes has there ever been any trace of pre-formed cartilage found, so that the intra-cartilaginous mode may be at once dismissed. If, then, there is any resemblance to either of the physiological modes, it must be to the intra-membranous.

What data we have will enable us to trace the process very much as follows: The beginning must almost necessarily be a chronic parenchymatous choroiditis, with the deposit of a layer of inflammatory exudate composed of low-grade connective tissue. This serves as the membranous basis. This layer has blood-vessels supplied by the choroidal vessels, and, possibly, even some by the retinal. There is probably even some preliminary calcification, although this early step has not been observed. At one or more points the ossification begins, thus reminding one of the ordinary "centres of ossification" in the physiological mode. Here the connective tissue is arranged in strands, with soft granular matrix, and with somewhat larger, granular, nucleated cells arranged along the trabeculae. This is

the "osteogenetic substance" of Heinrich Müller. Whether these cells, which now take on the function of osteoblasts, are derived from the ordinary lymphoid cells of inflammation, or from the normal connective tissue-cells of the choroid, is difficult to determine. These cells probably excrete the soft amorphous or granular matrix, in which they imbed or surround themselves. Such a cell, so inclosed, becomes a "corpuscle," and the space it maintains about itself a "lacuna." Berger ("Beiträge zur Anatomie des Auges in normalem und pathologischem Zustande," 1887, p. 78) has observed this early stage. In these strands or laminae the calcareous salts are deposited. Thus little, thin, bony spiculæ or small plates are formed. These increase in thickness by the apposition of a new layer similarly laid down by the cells, which cover their surfaces. They also become joined by little uniting bridges.

The outcome is a thin layer of spongy-like bone resembling the earlier layers of periosteal bone. Later there go on the same changes we see in the physiological development. The presence of Howship lacunæ and changes in the corpuscles indicate the absorption of the earlier deposits. Then there ensues the formation of more solid and compact Haversian lamellæ and of smaller Haversian canals.

With the more compact growth of the bone there is also a development of these marrow-filled spaces.

What should start this osteogenetic process in this chronically inflamed connective tissue exudate is, of course, rather inexplicable, but not more so than is the ossification that occasionally occurs in some neoplasms in which no cartilage is found. In fact, bearing in mind the analogy of intra-membranous ossification under physiological conditions, this choroidal ossification is not as difficult to understand as are the examples just quoted.

[FOR DISCUSSION SEE P. 203.]

SUCKING the juice of one or two lemons is a valuable remedy for excessive menstruation.—*Med. Summary.*

ECTOPIC PREGNANCY TWICE IN SAME PATIENT.¹

REPORT OF THREE CASES.

BY C. B. SCHOOLFIELD, M.D.,
DAYTON, KY.

The subject of ectopic pregnancy has been so frequently and fully discussed by the members of this society that I feel that an apology is due them for again presenting it this evening. The infrequency, however, of a second occurrence in the same patient may justify me in reporting the two following cases with a few appended remarks.

CASE I.

Mrs. C. C., aged twenty-seven, was operated on February 8, 1890, by Dr. Thad. A. Reamy (case reported to the Academy of Medicine of Cincinnati, and published in LANCET-CLINIC, December 20, 1890). Her health after operation remained good, and menstruation regular up to and including November 15, 1893. She missed her regular period in December, 1893, which was followed by signs of pregnancy, such as morning sickness, enlargement of breast, etc. January 1, 1894, she had slight and irregular flow, with colicky pains lasting one week. February 25 she had more severe pains, with syncope, followed by slight hemorrhage. March 8 took a short ride in a carriage, which again brought on the "flow." She remained in bed after this until April 29, when she was allowed to sit up, but was compelled to lie down on account of faintness. May 6 Dr. Arthur Johnstone was called in consultation. Owing to constipation and a distended rectum a satisfactory examination could not be made. She was given a cathartic and bowels emptied, Dr. Johnstone returning the next day. The abdominal walls were so thick and the uterus drawn up so high that its size and shape could not be made out, but to the right could be felt a tumor the size of a small orange. Taking all the symptoms, so similar to her former

¹ Read before the Obstetrical Society of Cincinnati, September 9, 1897.

tubal pregnancy, together with the lump to the right of the uterus, it was Dr. Johnstone's opinion, in which I fully concurred, that it was tubal pregnancy, ruptured into the broad ligament. The patient made a perfect recovery, and is enjoying perfect health at this time.

CASE II.

Lucy B—, aged twenty-nine, was operated on by myself June 29, 1892, for abdominal pregnancy three months after full term and death of child. (Case reported to the Academy of Medicine of Cincinnati and published in LANCET-CLINIC, December 3, 1892, vol. xxix.) She made a good recovery, and remained in good health, menses regular, until February, 1896. Her husband came to see me in April (1896), saying his wife was pregnant and suffering so much from vomiting and pain that she wanted me to come and see her. As I had attended her in her former trouble through charity, and as she lived in an adjoining city and was in the hands of a competent physician, I refused to go, not knowing, of course, that it was other than normal pregnancy. In a few days she sent one of her neighbors, who said she was in a very bad condition, and begging for me to see her; I agreed to see her with her physician. She had a high fever, distended abdomen, extremely sensitive, especially over the left iliac and right hypochondriac regions, and was profoundly icteric. A tumor could be seen and felt in the left iliac region, and on digital examination a large fluctuating mass could be felt pushing the uterus to the right. She gave a history of irregular menstruation, with colicky pains, of shock with syncope, and the passage of a pseudo-deciduary membrane. She had general peritonitis, and the symptoms indicated suppuration in the sack. Diagnosis: ectopic pregnancy.

Dr. C. L. Bonifield was called the next day, May 10, in consultation, and concurred in the diagnosis, and we both ventured the opinion that her case was complicated with stone in the gall-bladder. She was sent to the Good

Samaritan Hospital the next day. Dr. Bonifield operated on the 12th. An incision was made immediately behind the uterus. A large quantity of organized blood-clot, with the fetus of about three months' gestation and a part of the placenta, was turned out, the cavity flushed with hot sterilized water and packed with iodoform gauze. The patient died in about three hours after. An autopsy was held thirty-six hours after death. A calculus the size of a pigeon's egg was found in the gall-bladder. The left tube was ruptured and contained a portion of the placenta. The adhesions were so dense that it was impossible to get the uterus and appendage out in a condition for satisfactory examination, and no microscopic examination was made.

As stated in the beginning of this paper, but few cases have been reported in which ectopic pregnancy has occurred twice in the same patient. The list of recurrences, as far as I am able to collect them, are as follows:

Lawson Tait, one, confirmed by autopsy.

Hayden, one, confirmed by autopsy.

Veit, Jr., one, confirmed by laparotomy; recovery.

Carl Beck, one, confirmed by laparotomy.

K. Abel, one, confirmed by laparotomy.

J. M. Duff, one, confirmed by laparotomy.

J. F. W. Ross, one, confirmed by laparotomy.

H. C. Coe, one, confirmed by laparotomy.

E. Herrman, one, confirmed by laparotomy.

Other cases are reported by Veit, Jr., Kletsch, Olshausen, Seigenbeck, Van Heukelom, Frommel, Leopold Meyer, Meckenrodt and Winckel, but not verified by abdominal section or autopsy. Coe's and Hayden's cases were the most remarkable, being examples of second occurrence in the same tube.

Notwithstanding the exhaustive study that has been given this subject, the etiology is in some respects

obscure. Until the point at which fertilization of the ovum takes place is fully established, our knowledge of its physiology and pathology must be imperfect. Normally we have three factors that carry the ovum to the uterus: The peristalsis of the tube, the cilia, and the wave or current that exists between the peritoneal cavity and the uterus, interference with any or all of which may be the cause of tubal pregnancy. Twists of the Fallopian tube, due to arrested development; inflammatory conditions that paralyze, bind down or occlude the tube or destroy the cilia; uterine or ovarian neoplasms and diverticula of the tube, are the principle factors.

There are but two points in regard to the treatment to which I wish to draw your attention and elicit discussion. One is the choice of methods of operating, the other is our duty in regard to the remaining appendage. The route usually selected is the abdominal, and in a majority of cases it is probably the best, but there are many, among these second occurrences especially, in which the vaginal route is to be preferred. In such cases as the one just related, where the first was an abdominal pregnancy and the sack left, the adhesions are so extensive as to make celiotomy extremely difficult, if not impossible; besides, these adhesions act as a barrier against excessive hemorrhage and limit the loss of blood. In the earlier stages of pregnancy, where the tube has ruptured and active hemorrhage has ceased, or if there are indications of suppuration, the vaginal route offers the best means for removing the contents of the gestation-sack and drainage. The patient should, of course, be prepared for laparotomy in case active hemorrhage should occur during the vaginal operation.

The duty of the operator with reference to the remaining tube is a grave one. If no children have been born, and there is an earnest desire for offspring, it would be an additional calamity to deprive them of this hope. If there are no macroscopic evidences of disease, our scruples might be easily allayed; but should there be deformity

of the tube or the slightest evidence of disease, the responsibility of leaving it should rest with the parties themselves after the danger of so doing is fully explained to them.

After hearing the report of Dr. Hall's case at our last meeting, it appears that ocular evidence is not sufficient to prove that it is safe to leave even an apparently healthy tube behind, and in the future the writer would feel it his duty to place the patient beyond such a possibility, or, as stated above, let the responsibility rest with those most liable to suffer.

[FOR DISCUSSION SEE P. 195.]

Post-Partum Eventration.

At a recent meeting of the Paris Obstetrical and Gynecological Society (*Indépendance médicale*), M. Doleris reported the case of a young girl who, to conceal her condition of pregnancy, laced so tight as to force her belly down on to her thighs. Her labor was normal, but involution was unsatisfactory and a very pronounced eventration was observed. M. Doleris excised a broad strip of the abdominal integument and stitched the recti muscles together. The result was perfect cure.—*Indian Lancet*.

Guaiaccol.

This is the active principle of creosote. The latter itself is not a definite product, but a mixture containing, along with guaiacol, toxic cresols and toxic derivatives of pyrogallol. Liquid guaiacol is never quite pure, as it contains only seventy-five per cent. of the pure substance. Chemically pure guaiacol is a pharmaceutical possibility, but, like all the phenols, it is too irritating to be used except in very small doses. Moreover, it has an offensive odor and a burning, bitter taste.—JAMES E. NEWCOMB.

NEURASTHENIA may be called forth in an individual suitably predisposed by active life with its modern needs on any pretext—over-exertion, excesses, trauma, constitutional diseases, acute and chronic infections, syphilis, intoxications.—BINSWANGER.

INTUBATION WITH IMPROVED INSTRUMENTS.¹

BY MAX THORNER, A.M., M.D.,

CINCINNATI,

PROFESSOR OF CLINICAL LARYNGOLOGY AND OTOTOLOGY, CINCINNATI COLLEGE OF MEDICINE AND SURGERY; LARYNGOLOGIST AND AURIST, CINCINNATI HOSPITAL, ETC.

In demonstrating a set of instruments which may be called improved instruments, I wish to state that I do not think the word "improved" could possibly be applied to the method of intubation itself; for when Joseph O'Dwyer gave his great invention to the world he had for five long years worked at it at the New York Foundling Asylum with such assiduity that the method was then well-nigh perfected. Indeed, all possible objections and obstacles had received so much of his thought that little, if anything, had to be added, that was of importance, to the original communications of the inventor. However, those who have used the method a great deal have suggested from time to time that it might be possible to overcome some of the difficulties in the manipulation of the instruments used for intubation by making certain changes in them, whereby the method would be more facilitated. This would not in any way diminish O'Dwyer's immortal merit, nor influence the characteristics of his method. On the contrary, it was likely to advance its usefulness and appreciation of its value, for no one would think it worth while to make efforts at improving a thing of little or no value.

All of those who have had some experience, or, I should say, rather a great deal of experience, with intubation, know that at times the manipulation of the instruments may become quite difficult. One of the troublesome features is that one needs two separate instruments for either introduction or extraction of the tube. In addition, the introducer is, as you all know, quite a complicated instrument, the terminal screw of which frequently does not hold the tube firmly in the right posi-

tion. Another disadvantage is that each of the six tubes requires an obturator of its own, and it not infrequently happens that the old obturators do not always exactly fit new tubes of the same size. The old extractor is likewise a complicated instrument, and everybody knows that it is not always easy, even for expert intubators, to remove the tube with the aid of it.

It has been attempted at a very early day to overcome some of these difficulties by some alteration in the instrumentarium. One modification in the extracting apparatus, which is used a great deal, is that of Dillon Brown, which consists of a hook fastened to a thimble and a ring attached to the upper end of the tube. By this means, with the thimble placed on the right index finger, the tubes are extracted. However, there have been a great many attempts at combining the introducer and extractor into one instrument, and to do away with the obturators, the latter having often been the cause of great annoyance to the operator. A good many different instruments have been invented for this purpose, the description of which I will omit.

The greatest advance was made in the instrument of Ferroud, which I show here, and which is rather complicated, as it consists of seven distinct parts which cannot be readily taken apart. On the principle of this treatment, an introducer and extractor combined has been constructed by a Chicago firm,¹ which surpasses, in my opinion, all former attempts at simplifying these instruments.

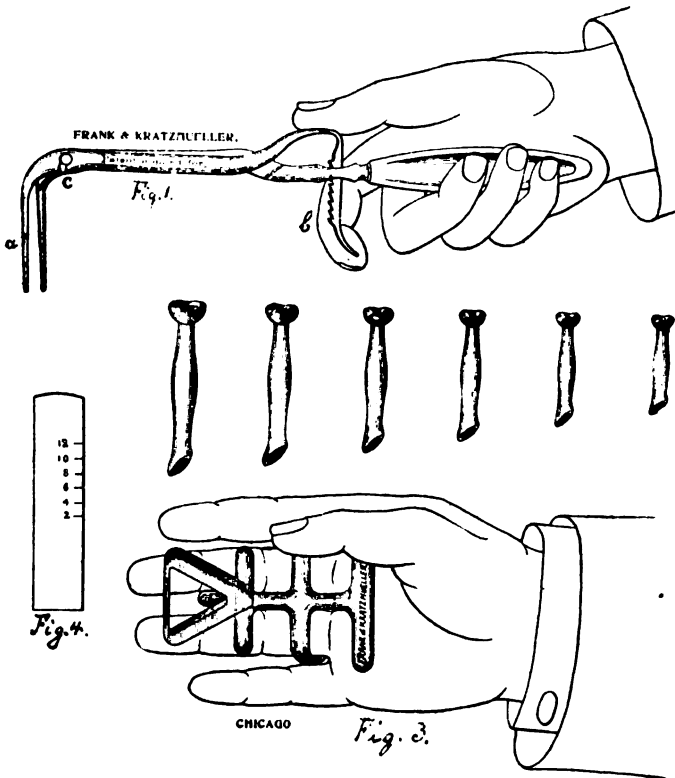
The instrument which serves as introducer and extractor (Fig. 1) has at its distal extremity two serrated beaks (*a*) about two inches long. They are opened by a pressure with the thumb on the upper portion of the lever (*b*), and are automatically held open by a ratched arrangement, while pressure with the index finger upon the lower end (*c*) of this ratched bar relieves it and closes the beaks. By firm pressure the beaks hold the tube im-

¹ Demonstrated before the Academy of Medicine of Cincinnati, February 7, 1898.

¹ Frank & Kratzmueller, 56 Dearborn Street, Chicago, Ill.

movably, so that it cannot slip off nor turn during an attempt at introduction or extraction. This whole instrument consists of only two parts, the handle with one beak and the lever and ratched arrangement with the other beak (*b* and *a*), which two parts are readily taken apart by screwing the thumb screw (*c*) towards the right. This

greatly, when the tube is in the larynx, inasmuch as it allows the beaks to glide from any point of the rim almost automatically into the opening, and what this means can be appreciated by those who have had experience with the old extractor. Another change that the tubes have received is that the lower end has been cut off at an angle of about



screw has the further advantage of being so fastened to the instrument that it cannot be removed from the shank of it by unscrewing it in either direction, and therefore cannot be lost at a time when such a loss would frequently cause a very disastrous delay.

The tubes also have been slightly modified. While the general configuration of the tube is an exact reproduction of the original O'Dwyer tube, the top of it has been slightly changed, in that the opening has received a funnel shape, slanting from the edges of the rim of the tube towards the centre. This facilitates the introduction of the beaks

forty-five degrees, slanting from right to left. This facilitates the passage of the tube between the vocal cords, and at the same time will prevent injury to the tissues, as the knob of the obturator, which in the original tubes closes the opening of the tubes, is absent in these tubes. This absence of the obturator and its knob has the additional advantage that air passes through the tube along the side of and between the beaks of the introducer during and immediately after introduction, a fact which contrasts with the absolute obstruction to breathing while the obturator of the old instrument is in the tube. There-

fore, with this instrument the operator need not be in such a hurry to introduce the tube and to withdraw the obturator.

A mouth-gag is furnished with this set of instruments which differs from the one usually found in the set of O'Dwyer's instruments. It consists of a wedge-shaped mouth-piece, which is fastened to two steel rings by the aid of a curved bar (Fig. 3). In using it the assistant puts two fingers of his left hand through the rings, places the wedge-shaped mouth-piece, which is well covered with rubber tubing, between the left molars, and keeps the left hand firmly pressed against the cheek of the patient. In this manner he not only keeps the mouth opened, but also steadies the head of the patient at the same time.

It can be readily seen that the method of intubation has not been altered in any degree by the use of these instruments, which will appeal to many as simplifying the manipulations to a great extent.

In conclusion, it may be added that the old tubes can be used with this new introducer and extractor as well as the new tubes.¹

Bilious Headaches.

In all cases of sick headache there seem to be two factors—the general condition of the body and the local cause determining the pain to the head rather than to any other part of the body. One of the most common of the local factors is disturbances of the eyesight. I should say in nineteen cases out of every twenty—perhaps I ought to say in forty-nine out of fifty—the exciting cause of so-called bilious headaches is irregular vision due either to inequality of the two eyes or to astigmatism.—T. LAUDER BRUNTON, "Lectures on the Action of Medicines."

TINCTURE of aloes, diluted one-half, or even more, by water, is said to be an effective injection in gonorrhea after the acute symptoms have subsided.—*Med. Summary.*

¹ Cincinnati agents for these instruments are Messrs. Max Woche & Son, 23 W. Sixth Street, Cincinnati, O.

A REMARKABLE CASE OF IODISM, PRODUCING CEREBRAL COMPRESSION.

BY L. R. CULBERTSON, M D,

ZANESVILLE, O.,

OCULIST TO THE U. S. PENSION BUREAU, CITY HOSPITAL,
C. & M. V. AND B., Z & C. R. R., ETC.

Mr. J. S., aged forty-one. When a boy left eye was injured by a fish-hook entering cornea. After some years it set up sympathetic irritation of the other eye. Some six or seven years ago both eyes were iridectomized by one of Cleveland's most eminent ophthalmologists. Complete posterior synechia, both eyes. Good and sufficient iridectomy in both. Left eyeball somewhat sunken. T. R. E. + 3. Vision: R. E., J. 20. Advised enucleation of left eye, which was done a week since. After several days put him on ten-grain doses of iodide of potash three times daily, with the hope that it might produce a more healthy condition of the choroid and ciliary body. After taking the second dose of iodide he complained some of coryza. In the evening, immediately after taking the third dose, he had great difficulty in breathing, and I was called to the City Hospital and found him in a state of collapse. Pulse 60, respiration 14, temperature 99½° in axilla; could only breathe in an erect position, and even then respiration was almost paralyzed; heart very weak and intermitting, and character of beat indicated compression of motor centre in medulla; no abnormal respiratory sounds in lungs. He had a chill in the afternoon. The socket of eye removed was doing well, and not swollen or erysipelatous. The lids of right eye were enormously swollen and conjunctiva chemosed. Right side of nares swollen and closed, left not so much. Jaws not locked or tonsils or glands swollen; no ptialism. Violent headache; almost total paralysis of muscles of deglutition; speech partially paralyzed; slight deafness.

I was first in doubt as to whether he was suffering from iodism alone or whether pus had passed into cerebral circulation and formed a thrombus in

cavernous sinus and thus caused compression of centres of nerves paralyzed. Gave him a hypodermatic injection of $\frac{1}{30}$ gr. strychnia, $\frac{1}{150}$ gr. atropine sulph. and $\frac{1}{60}$ gr. nitroglycerine. After twenty minutes the pulse grew stronger, but breathing was bad for several hours, and was not normal for ten hours. At the end of that time the swelling of right lids, and coryza, headache and difficulty in swallowing had disappeared.

The partial paralyses were due to cerebral compression produced by congestion of meninges of base of brain caused by iodide of potassium. Iodide produces congestion of mucous and serous surfaces, and hence its action in this case. I have not been able to find any report of a similar case or any literature bearing on the subject of cerebral compression from iodism.

Apenta Water in the Treatment of Obesity.

The *Berliner klin. Wochenschrift* for March 22, 1897, speaking of some experiments made under Professor Gerhardt's direction in the Charité Hospital as to the value of Apenta Water in the treatment of obesity, says that such experiments could not be carried out until quite recently, on account of the inconstant composition of the bitter waters coming into the market. In this respect, the Apenta Water is favorably circumstanced, and it was chosen for these observations because of its constancy of composition. The conclusions arrived at as to the value of Apenta in the treatment of obesity, and as to its influence on tissue-change, were that it succeeded in producing a reduction of fat in the body without detriment to the existing albumen, and that the general health of the patient suffered in no wise, and the cure ran its course in a satisfactory manner.—*N. Y. Med. Journal*, Feb. 5, 1888.

DR. H. T. WHITNEY, a native of Ohio and president of the China Medical Missionary Association, is now engaged in the difficult work at his home in China in translating Gray's Anatomy into Chinese.

THE Cincinnati Lancet-Clinic.

A Weekly Journal of Medicine and Surgery.

ISSUED EVERY SATURDAY.

J. O. CULBERTSON, M.D.,
EDITOR AND PUBLISHER.

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DR. J. C. CULBERTSON,
317 W. SEVENTH ST. CINCINNATI, O.

CINCINNATI, FEBRUARY 19, 1898.

Editorial.

TUBERCULOSIS.

This disease furnishes a theme never threadbare, and is of interest alike to general practitioner and specialist.

Since the discovery of the tubercle bacillus by Koch much has been learned of the disease that was formerly suspected and unsuspected. Its prevalence and extent is certainly much greater than was supposed, and its comparative mortality where infection exists is correspondingly less than was believed.

Scores and hundreds of people are every year more or less infected who recover, and in many instances the disease not diagnosed. It is known that the resisting power to the inroads of the disease is largely due in the individual to the strength of his or her ability to assimilate and digest nutrients. Where the nutrition is greater than the waste produced by tuberculous processes, and there are no other complications, the patient will almost assuredly recover. Hence, the necessity for a keeping on good terms with the patient's alimentary canal from one end

of it to the other. Now and then there are exceptions to this proposition, but they are not frequent.

It has been demonstrated beyond question that the nervous system also plays an important rôle in the progress of the disease. Hence, this should have the continuous attention of the physician.

Isolation of those who are suffering from the disease is very important, and for their own benefit should be carried out as effectually possible.

That the bacillus as found in nearly every locality cannot be banished is probable, but that it may be diminished to a very considerable extent is quite possible. Expectoration in street- and steam-cars should be curtailed to the fullest extent. The practice is always filthy, and notices should be kept prominent in all passenger vehicles. The notice itself will have a good influence in deterring the practice. Bar-rooms and places where men congregate should have such notices posted. The reformation will not be immediate, but in time—and not a long time, either—will produce a very perceptible change.

The establishment of a hospital at the edge of the city limits of Cincinnati has been followed with most gratifying results. The patients are better cared for than is possible in any other way. Dr. Lyle reports remarkable improvement as taking place in some of the cases in the hospital, and indicates the value of methods of treatment being pursued by him.

A specific has not yet been discovered. This has been the *ignis fatuus* that has continuously beckoned the physician in this direction and then to that, seemingly just within his grasp, and then elusively skipping beyond his reach.

It is believed that the dauntless

searcher will eventually grasp the problem that will solve the mystery in regard to all infectious diseases, including tuberculosis. No obstacle will be too great for him to overcome, but until his reports are positive and proof beyond question the rational methods of increasing nutrition, and that to the limit, improving neurotic conditions and allaying symptoms of distress will continue to be chief factors in treatment.

Dr. Lyle affords his patients much relief from cough by giving spray injections of menthol through a tracheal tube. This is no doubt a valuable remedy in the way of allaying the activity of the tubercle bacillus. It does not destroy the bacilli, but puts them in a dormant condition, which gives the nutritive forces a better leverage in the way of helping the patient to resist the destroying influences which are going on. Whatever beneficent influence may be obtained from the use of creosote is no doubt because of its power in reducing the vital activity of the bacillus.

THE CINCINNATI HOSPITAL.

According to the daily papers, the trustees of this institution are preparing to go to the Legislature with a bill having for its purpose an issue of bonds with which to enlarge that institution.

Since the cutting down of the number of patients through a carrying out of some suggestions offered in this journal, there does not seem to be a very pressing demand for new wards; in fact, there are several vacant wards at this time, and others only partially filled. A continued watchfulness on the part of general practitioners will keep those wards empty for some time to come.

The hospital is only for helpless

paupers, and there should be an education of the people by physicians into a belief that a going to the hospital puts them on the charity-list, and that those who enter the so-called paywards do so for some reasons which may not be creditable to the individual who goes there. It is not a crime to be either sick or poor, but it points that way when men and women go to a charity hospital who can be cared for in their own homes or by friends. The instinct that impels some people to try to obtain something for nothing is wonderfully strong.

The Secretary of the New York State Board of Charities says one-half of the people of New York City seek free aid at dispensaries and hospitals, and that half of such applicants are amply able to pay for the services of a physician. He had found many of the applicants at dispensaries were receiving salaries of from twenty to forty dollars per week, and some even more, and in one instance struck a merchant who owned real estate valued at one hundred thousand dollars. The story of the detection of Mrs. Hetty Green soliciting free medical attendance has been told. These are conditions which are known to exist to a considerable extent in every large city.

The country drains such cases into the city at a loss to the local physician. Legislatures of some States are being petitioned to afford relief to the medical profession by enactment of restricting laws. In view of these facts and conditions shown to exist in this city, it is somewhat doubtful whether the Ohio Legislature will authorize an issue of bonds to enlarge a half-empty hospital.

Complaint is made by the internes of the Cincinnati Hospital of the scant amount of clinic material in the wards, a condition to be endured with much

satisfaction on the part of general practitioners not on the staff.

Never-closing eyes should be kept on watch by the medical profession.

EISELEIN VS. PALMER.

The malpractice suit brought against Dr. C. D. Palmer in the name of Mrs. Eiselein was last week decided in favor of the defendant. The original suit was brought about eight years ago and has been heard in court two or three times. In a former trial the jury disagreed. The last trial lasted five weeks, and was stubbornly contested on both sides.

EDITORIAL NOTES.

REPORT OF THE HEALTH DEPARTMENT OF CINCINNATI. — Following is the statement of infectious and contagious diseases for week ending February 11, 1898:

	Cases.	Deaths.
Measles.....	21	..
Diphtheria.....	5	..
Scarlet Fever.....	11	..
Typhoid Fever.....	7	4
Phthisis Pulmonalis.....	8	14
Membranous Croup.....	1	1
Pertussis.....	31	2
Varicella.....	3	..
Total.....	87	22

The mortality report for the week ending February 11, 1898, is as follows:

Croup.....	1
Diphtheria.....	1
Influenza.....	1
Typhoid Fever.....	4
Whooping-Cough.....	2
Other Zymotic Diseases.....	1—10
Cancer.....	6
Phthisis Pulmonalis.....	14
Other Constitutional Diseases....	7—27
Apoplexy.....	2
Bright's Disease.....	1
Bronchitis.....	8
Convulsions.....	3
Gastritis and Gastro-Enteritis.....	2
Heart Disease.....	6
Meningitis.....	4
Nephritis.....	6
Pneumonia.....	17
Other Local Diseases.....	14—63

Deaths from Developmental Diseases..	7
Deaths from Violence.....	5
Deaths from all causes.....	112
Annual rate per 1,000.....	14 38
Deaths under 1 year.....	23
Deaths from 1 to 5 years.....	10 - 33
Deaths during preceding week.....	122
Deaths corresponding week 1897.....	101
Deaths corresponding week 1896.....	148
Deaths corresponding week 1895.....	128

AMERICAN ACADEMY OF MEDICINE.—

Following is the announcement and preliminary programme of the twenty-third annual meeting, to be held at Denver, Colo., on Saturday, June 4, and Monday, June 6, 1898.

The meeting will be held in the Brown Palace Hotel, which has been made the headquarters of the Academy, the management having given special rates for the occasion. It is suggested that rooms be secured early, especially if it is intended to remain to the meeting of the American Medical Association.

It is planned to hold three sessions on Saturday, beginning at 10 A.M., at 3 and at 8 P.M. Another session will be held on Monday at 10 A.M., at which time it is hoped all the business can be completed, affording the fellows an opportunity to attend the meetings either of the Association of American Medical Colleges or the National Confederation of State Medical Examining and Licensing Boards, which meet on this day. This plan contemplates holding the reunion session Monday evening.

The following papers have been promised. Several others have written expressing a desire to prepare a paper, but as a definite promise has not been given, it is thought wisest not to publish their names. The arrangement is alphabetical, and not in the order in which the papers are to be read.

1. Dr. L. Duncan Bulkley, of New York: The President's Address.

2. Dr. Charles Denison, of Denver: The Advantage of Physical Education as a Prevention of Disease.

3. Dr. Thomas C. Ely, of Philadelphia: The Importance of Training the Special Senses in the Education of Children.

4. Dr. J. Edgar Fretz, of Easton, Pa.: Some Criticisms on the Questions of the Medical Examining Boards by a Recent Graduate.

5. Dr. G. G. Groff, of Bucknell University, Lewisburg, Pa.: The Necessity of Medical Supervision in School-Life.

6. Dr. Bayard Holmes, of Chicago: Growth and Strength and Its Relation to Education and Medicine.

7. Dr. Henry M. Hurd, of Baltimore: How Much to Educate the Growing Brain.

8. Dr. Woods Hutchinson, of Buffalo: The Muscular Basis of Education.

9. Dr. Edward Jackson, of Philadelphia: The Care of the Eyes During School-Life.

10. Dr. Elmer Lee, of New York: The Interdependence of Healthy Bodies and Healthy Brains.

11. Dr. J. C. Lichty, Clifton Springs, N. Y.: The Modern Sanitarium and Its Relation to the General Medical Profession.

12. Dr. Charles McIntire, of Easton, Pa.: Snags in the Course of the Medical Examining Boards.

13. Dr. Rupert Norton, of Washington, D. C.: The Child's Brain as Illustrated by Recent Neurological Studies.

14. Dr. F. T. Rogers, of Providence, R. I.: The Ethical Advertiser.

15. Dr. J. T. Searcy, of Tuscaloosa, Ala.: How Education Fails—Physiologically Considered.

16. Dr. Charles G. Stockton, of Buffalo: The Kindergarten.

17. Dr. James L. Taylor, of Wheelersburg, O.: The Amount of Work a Growing Brain Ought to Undertake.

18. Dr. Casey A. Wood, of Chicago: Kindergarten and Primary Grade Work in the Public Schools and Its Influence Upon the Eyesight.

There is room for the presentation of a few more papers. Fellows desiring to contribute are requested to send the title to the Secretary promptly.

Many of these papers are planned for the discussion, "The Physiologic Side of the Education of Youth," the special theme suggested for the meeting.

Urethral Stricture.

Wyeth (*N. Y. Polyclinic*) mentions a case of twenty years' standing, that was impenetrable to the smallest bougie, and on making a perineal section he found an inch and a half of urethra so hard and cartilaginous that he dissected out the entire stricture and obtained an excellent result.

The Dispensary Abuse.

A remedy for the abuse of medical charity, which has been suggested in Philadelphia, is that treatment at the dispensaries be given only to those bringing from some charitable association a certificate as to their worthiness. *N. Y. Med. Record*.

ACADEMY OF MEDICINE.—Monday evening, February 21, the guest of the evening, Dr. Karl Bremer, of St. Louis, will demonstrate his method of blood examination in diabetes mellitus.

PUBLISHER'S DEPARTMENT.

FOR SALE — Thirteen volumes of "Twentieth Century Practice," cloth, \$3.00 per volume, purchaser to continue the subscription. Address TWENTIETH CENTURY, this office.

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"The work is concise, practical and in accord with the most recent advances in neurological science." F. W. LANGDON, M.D.
February 8, 1898.

A CONTRIBUTION TO THE LITERATURE OF EPIDEMIC INFLUENZA. — Dr. Aladar Békés, Vienna (*Wiener med. Presse*), says:

During the winter of 1889-1890, when the influenza epidemic raged in Europe, many physicians thought they had encountered a new disease, as influenza had almost been forgotten, for the last visitation of an epidemic dated back some sixty years (1830 to 1833).

Influenza is an acute infectious disease, which remains latent in unknown regions for many years, only to make its appearance epidemically, yes, even at times endemically, throughout a country or a whole continent. The evidences of these epidemics can be traced back to the twelfth century (A. Hirsch). They do not disappear as quickly as they come, and only after numerous smaller or larger outbursts do they pass away entirely. Even now we hear of characteristic clinically observed cases.

Climate and season seem to bear but little weight on the spread of this disease, although it has been noticed that the epidemics seldom occur in summer. As soon as an epidemic makes its appearance, the larger part of the population, without regard to sex, age, or social standing, contract the disease; the healthy and sick, the strong and weak, all are likewise attacked.

The treatment is mostly symptomatic. I give in the beginning, as in all infectious diseases, a laxative, preferably calomel, in doses of 2 to 5 grains for adults (one-tenth the amount for children). The calomel is divided into three powders, given at intervals of one hour. As long as the fever lasts rest and a fever diet are indicated. Formerly I employed internally and given three to four times daily: Quinine 3 grs., antifebrine 4 grs., antipyrine 10-15 grs., sodium salicylate 10-15 grs.

Since 1890, however, I use almost exclusively salipyrin not only in influenza but also in ordinary catarrhal affections, rheumatism and neuralgia. I prescribe as an evening dose 15 grs. (seldom 20 to 30 grs.), mornings generally one-half that amount, although at times I do give 10 to 15 grains. For children one-tenth to one-half the above-mentioned doses according to age. I never noticed any unpleasant after-effects from its use, and I was never compelled to resort to larger doses than those I have already mentioned. With this remedy I have obtained, without a doubt, the best results, which now and then were almost phenomenal in character. I noticed, as has also v. Mosengell, that salipyrin must be continued for some time in order to achieve a good result. I prescribe 10 grs. at night for three to five days after the fever has disappeared. Even after the fever has fallen to the normal the patient should be confined to his room for a number of days. The eventual complications are to be treated by the usual accepted methods of therapeutics.

TESTS FOR DIPHTHERIA ANTITOXINE.—

The tests employed for the estimation of the potency of antitoxic serum are only of value when the toxine employed for the investigation is the same that was employed for the inoculation of animals destined to furnish the antitoxic serum. Ignorance of this fact has prevailed until very recently, and it may be said that there are but few members of the profession that are as yet aware of it. A number of months ago tests of various makes of antitoxine were made in a laboratory, and one of these was found, according to the reporters, to be below the standard claimed.

We can most readily see the worthlessness of the results arrived at, when we consider what occurred to Dr. C. T. McClintock, of Detroit (*Med. News*, October 30, 1897). We must quote his own words: "It has been recognized for some time by every competent observer that our tests are very unsatisfactory and unreliable. One bacteriologist would report that a given serum contained only a half or a third the number of units which another had found. Several months ago I had a bottle of serum divided into four equal parts. One of them was sent to a bacteriologist at Ann Arbor, another to Detroit, another to Philadelphia, and the fourth to New York, with requests for an accurate test of the number of antitoxic units in each cubic centimeter. Every

one of the bacteriologists to whom this serum was sent has had large experience in testing antitoxine. The reports made were as follows: (a) 150 units per c.c.; (b) 175 units per c.c.; (c) 100 units per c.c.; (d) 250 units per c.c." Dr. McClintock goes on to say that "there is nothing strange in such variations, if we remember that the foundation of the test is the strength of the toxine, or in other words, the lethal dose of a poison." Further on we find that "at the Berlin control station they have had the same experience, and finally concluded that the test was wholly unsatisfactory and abandoned it, or rather modified it."

It has also been found that serums of a high potency very rapidly lose their antitoxic power, and at the Behring Laboratory they have ceased to place on the market any that contains more than 250 units per cubic centimeter.

There is another factor of importance, however, which McClintock does not mention, and which is a source of fallacy in the application of any test upon animals. It consists in the fact that there are animals which, like men, show idiosyncracies in regard to poisons of any nature, and that an animal is frequently found which will show an astonishing power of resistance, or an extreme sensitiveness. If such an animal is employed for a test it will of necessity produce an erroneous conclusion. These idiosyncracies make it absolutely impossible, with living animal reagents, to arrive at mathematical conclusions.

Again, a third factor of interest exists. This consists in the fact that, according to Madsen, of Norway (*Uni. Med. Jour.*, April, 1897), and others, "it is not easy to secure a constant production of the diphtheria toxine; although he used a very virulent species, the cultures in bouillon gave very different results, the variations occurring without any known reason." He also found that when toxins from different laboratories are employed to test the serum, the result is different, even when the lethal minimum dose of the toxine is accurately determined. A serum, which is calculated in one laboratory to be of 100 units, may in another laboratory, where the toxine is different, only reach the force of 30 units.

More could be said, but it appears unnecessary, to prove that the tests upon which certain makers pride themselves have absolutely no character of reliability.

It has lately been stated that in New York the State health authorities would soon begin to test all the makes of antitoxine found in the market, at regular intervals. We welcome the idea, which is a praiseworthy one, providing the tests are so conducted as to eliminate all possible source of error. The only way in which this can be accomplished, it would seem, is the following: The State health board should furnish its own toxine to the makers, and thus enable them to test their product with it before sending it upon the market. And here we may add that each test should be conducted upon more than one animal, to save against error by idiosyncrasy.—*Pasteur Bulletin*, December, 1897.

Society Reports.

OBSTETRICAL SOCIETY OF CINCINNATI.

Meeting of September 9, 1897.

The President, C. L. BONIFIELD, M.D., in the Chair.

E. S. MCKEE, M.D., Secretary.

DR. C. B. SCHOOLFIELD read a paper entitled

Ectopic Pregnancy Twice in the Same Patient (see p. 184).

DISCUSSION.

DR. C. D. PALMER: Doctor, before you take your seat, would you be kind enough to state, in this case, which was a tubal case, was it not?

DR. SCHOOLFIELD: Yes, sir.

DR. PALMER: When that case was repeated, what kind of a case was it?

DR. SCHOOLFIELD: A tubal case, on the other side.

DR. PALMER: Was the tube taken out on the side first affected?

DR. SCHOOLFIELD: Yes, sir.

DR. PALMER: And in your second case, it was of twelve months' duration, was it not?

DR. SCHOOLFIELD: Yes, sir.

DR. PALMER: Was it a tubal or abdominal case?

DR. SCHOOLFIELD: It was an abdominal case.

DR. PALMER: And the second time it occurred in that case, what was the form of it?

DR. SCHOOLFIELD: The second time I suppose it was in the tube. I did not see the woman that time until shortly before her death.

DR. PALMER: Well, there is not very much to say with reference to those cases. They are interesting cases, of course, and there is certainly nothing to criticise, for the report was commendable and the treatment was all anyone could do.

In the first place, I think we should ignore the term "extra-uterine pregnancy," for the term is not applicable to all. A much more appropriate term would be "ectopic gestation," which

the doctor has employed. The term "ectopic gestation" indicates simply misplaced gestation. I am not one of those who are disposed to accept the statement, made by Lawson Tait and others, that all forms of ectopic gestation are tubal, even primarily. I do not see why we cannot have some cases that may be ovarian or tubo-ovarian, and some that may be abdominal at the start. I have operated upon quite a number of cases of ectopic gestation running from two to seventeen months. Some were clearly tubal, and in one case it was clearly interstitial. In another case it was tubo-ovarian, and in another case it was abdominal. In that case I could not get anything to contraindicate that it was abdominal. From the first I was disposed to think that it was abdominal. The adventitious sac was formed about the intestines; it did not embrace the tube or ovary. The child died at the usual time, at the end of normal gestation.

Now, this point occurs to my mind, which may be worthy of consideration: Many of these cases of ectopic gestation are dependent upon a morbid condition of the tubes, which has a specific origin. In other words, they are gonorrheal. Is it prudent to leave the opposite ovary and tube if there is gonorrheal salpingitis? We know that if there is a gonorrheal disease of the appendages of one side, of quantity sufficient and severity sufficient to justify a laparotomy, almost invariably we will find some infection on the other side, which, of course, is gonorrheal, and we will subsequently have a recurrence of the disease on the other side, and a second laparotomy will be necessary. I do not know how many cases I have read and heard of and seen in which a second laparotomy was needed for a serious infection of opposite ovary and tube when the original trouble was gonorrheal.

DR. RUFUS B. HALL: I was very much interested in this report. Before I accept the first case reported as a second tubal pregnancy I would want the positive proof of it by an autopsy or laparotomy. There is presumptive evidence that it was a case of ectopic gestation, but it was not proven by any

means. It is well known that nearly all of these cases have diseased appendages before they have an ectopic pregnancy. Then, with this patient known to have pelvic disease, there are many other ailments which could be mistaken for, and from the clinical history be confounded with, ectopic pregnancy. One striking point in the differential diagnosis to make clear an ectopic pregnancy would be the want of a large mass in the pelvis at the time the diagnosis was made. It is almost certain at that time she would not have had a mass the size of an orange, but a mass the size of a cocoanut or even larger. I am not willing to concede that it was an ectopic pregnancy. The second case was proven.

I was in the operating-room of a most distinguished operator a few months ago and there must have been twenty operators of note present. He removed a small tumor the size of a large orange, laid it on a pus-pan and some one spoke up and said: "What is that, Doctor?" He said: "It is some one of a dozen things, and I want some of you to tell me what it is." There were twelve or fourteen guesses, and not one said it was an ectopic gestation, yet there was a little baby in it. When we come to record a second tubal pregnancy we want to be certain that we are recording facts.

Speaking of different routes of operating for ectopic pregnancy, I think that must be settled always by the operator and the case before him. As a general working rule, I think the largest number of operators in the largest number of cases would take the abdominal route. There are cases that would have a better chance with a vaginal operation. Take that desperate class, in which the symptoms lead us to believe the hemorrhage has ceased and the patient is suffering from infection of the blood-clot. When the complications from above are to be taken into consideration, it looks like that case has a better chance to unload her sepsis when we cut through the vagina. The patient whose case was reported died. She would almost certainly have died had he cut her from above. She did not die

of hemorrhage; she did not lose much red blood. The unfortunate thing was that she was not operated upon soon enough. I believe we are learning every day that we can do a life-saving operation in these cases by draining through the vagina, letting out the accumulation of pus, without the hope of radically curing them. I believe a large number of good men fight the vaginal operation because they do not grasp the full situation. They fight it because they know, as I do, that we cannot always cure these patients permanently by the vaginal operation. But we can unload them, and then later they have a better chance to recover from a radical operation.

As to the advisability of removing the other tube, the profession is not united yet on that. You know the pendulum is swinging to save as much as you can of the woman's organs; if you can save half an ovary, do so; and if you can save one and a half, do so. But it is a very important question for the woman and a very embarrassing question for the operator to know what is best in each given case. Take the case reported at the June meeting by myself. From any naked-eye appearance she had a perfectly healthy ovary and tube, but in ninety days she had an ectopic pregnancy on that side, necessitating a second operation. Since then I have had a woman, about thirty-five years of age, who married a man about the same age, apparently perfectly well. He never had any sexual disease. The woman had never had any illness or pelvic disease. She had a tubal pregnancy before she was married nine weeks. The other ovary and tube was apparently as healthy as any. I said in the other case I would take them all out, but when I came to this I did not, because both the patient and her husband were anxious to save it.

DR. EDWIN RICKETTS: There was a time in the operation for extra-uterine pregnancy when it was considered a very dangerous procedure to attempt the complete removal of the placental sac. I think in the present manner of dealing with these cases no operator is justified in leaving a part of the placenta. There is danger when a portion of the

placenta is left, as was reported to-night, of hemorrhage, even with the gauze packing, and it is better to clean out all the placenta and deal with the bleeding vessels at that time than to leave the placenta and attempt to control the hemorrhage by packing.

As to the point of attack, I think the last speaker on the floor has well expressed my opinion, that if you are satisfied you have extra-uterine pregnancy with suppuration, you had better attack the mass by the vaginal route. I do not know why it is that such patients do not suffer so much from shock—that is, if you do not attempt to do too much at one sitting. I am quite certain we will accomplish more by simply opening up this abscess, draining it, and if necessary afterward do a second operation of abdominal section.

As to the removal of the other ovary, if you look over the cases in which extra-uterine pregnancy has occurred twice in the same subject, you will find the percentage is very, very low, possibly $\frac{1}{25}$ per cent. Would such a low percentage justify the removal of the opposite ovary? Isn't it better to leave it? Unless you have *prima facie* evidence of disease on the other side it is our duty not to disturb that ovary.

As to the abdominal route, I want to say that I have had a number of these cases to deal with, and I have never failed to remove every vestige of the placenta, and since the vaginal route has come so prominently before us, of course that is to be considered, for the reasons given heretofore.

DR. CHAS. BONIFIELD: In regard to the case in which I was interested, I chose the vaginal route for the reasons Dr. Hall has expressed. The patient was *in extremis* when I saw her, profoundly jaundiced, and we know, from our experience with gall-stone patients, such cases do not stand long operations. I knew we would have adhesions to deal with in the line of the incision if we operated from above. There was a large amount of blood lost, but it was not bright arterial blood, and I think the patient did not die from hemorrhage.

In regard to removing both appendages, I agree with Dr. Ricketts, that

the number of cases of ectopic gestation occurring twice in the same patient are so few that it does not seem to me we would be justified in so doing, unless, as Dr. Palmer said, we are certain the case is of gonorrheal origin. This is frequently the case. We must also be governed by the things that usually influence us in such matters—that is, whether or not the patient is extremely anxious to have a child, whether she is young or old, etc.

In regard to leaving the placenta, I think at times it is perfectly justifiable to do so. No one can tell what he will do with a case he has never seen. I think in Dr. Schoolfield's case, if it had been possible to remove the tube, he would have done so.

DR. HALL: I would like to ask Dr. Ricketts if in all stages of ectopic gestation, say in an operation at the sixth to the ninth month, would he always attempt to remove the placenta?

DR. RICKETTS: I most assuredly would.

DR. BYRON STANTON: Before the doctor closes the discussion I would like to ask if there are on record any cases in which patients have been delivered, after ectopic pregnancy, of children in the regular manner. It seems to me that is the thing for us to consider before we go to ripping out the ovaries and tubes in all these cases. I can conceive of there being such a diseased condition of one tube as to produce an extra-uterine pregnancy, while on the other side there might be no interference with normal gestation.

DR. PALMER: I would answer that question from my own personal experience. I operated upon a case in a lady, whom I thought almost dead. I was almost afraid to put her on the table for operation; she was pulseless and blanched from loss of blood. After the operation she had no pulse, and I put her on the bed thinking she would die at once. I stimulated her per rectum, and she got well. She has since been delivered of a child at term.

Now I wish to be specific in the statement as to when to take out the tube and ovary on the opposite side. I would never take it out if it is healthy,

but if it is diseased, particularly if we know positively that there is gonorrhea, proven by the history and microscopic evidence, I would remove both tubes. Many of these cases we know have gonorrhea. If there is any suspicion of gonorrhea, it becomes our duty to make a microscopic examination before operation. We know the history of some of these cases, for sometimes there is a chance of seeing the case before, and making a microscopic examination.

DR. EDWIN RICKETTS: It just happens that the last three laparotomies I have had were double laparotomies in which I have had to remove ovarian tumors from both sides. One was a large ovarian tumor on one side and on the other side an ovarian tumor only about the size of a walnut. In another case there was an ovarian tumor on one side of fifty pounds, and on the other side a tumor smaller than an unhulled walnut. In the third case each tumor was about the size of a cocoanut. I only speak of these in line with what we have been saying about the removal of the opposite ovary. We might say in the case of the fifty-pound tumor, which was of quite long standing, that it was only a question of time when the other side would be involved. In the case in which both tumors were about the size of a cocoanut, it would seem that they were almost simultaneous in development.

DR. PALMER: When it is not practicable to know anything definitely with reference to the previous condition of the patient and her history, and of course where it is not practicable to make this microscopic examination, assuring you positively of the existence of gonorrhea as being the causation of the trouble, then, of course, it is out of the question and not to be considered. But sometimes it is practicable.

DR. SCHOOLFIELD: I am very much obliged to the gentlemen for the interest they have taken in the paper, and for the very generous remarks and very just criticisms. I appreciate the fact that in the first case I reported we have not positive evidence of ectopic pregnancy, and I appreciate the fact, also, that you have a right to dispute the evidence.

But if the symptoms of tubal pregnancy are not more distinct, if the evidence is not as great or greater than that of any other abdominal disease of which we have to make the diagnosis without positive evidence, I do not know why. The fact is just this: We have the evidence in this case as we have in all these cases of tubal pregnancies or ectopic pregnancies we have the evidence of suppressed menses; we have the swollen breasts; we have the morning sickness; we have, in fact, all the evidence of pregnancy. There is no disease, except pregnancy, that will produce these symptoms. Then we had the shock, the syncope, and what pelvic disease except tubal pregnancy would produce that? The pain of rupture of a tubal pregnancy is characteristic of the disease. In this case we had every evidence. The woman had always menstruated perfectly regularly and had never missed menstruation except when she was pregnant. She had missed her menses and then after two months, I believe it was, she began to have an irregular flow, simulating a threatened abortion, which must be one of two things, either an intra-uterine abortion or an extra-uterine pregnancy to produce these symptoms.

DR. RICKETTS: I hope, Doctor, you will give us your views as to pregnancy taking place near the uterus and being extruded into the uterine cavity and being expelled in that way.

DR. SCHOOLFIELD: There are such cases reported, but that is the exception and not the rule. In this case we had a lump in the region of the broad ligament, which remained there quite a long time.

DR. HALL: Isn't it true, Doctor, that on more than one occasion good men have made a diagnosis of extra-uterine pregnancy and operated and not found extra-uterine pregnancy?

DR. SCHOOLFIELD: That is true, just as they have made wrong diagnoses of other diseases.

DR. HALL: Now, while I grant your case proves the things as much as it can until we have the specimen in our hands, still it does not absolutely prove it.

DR. SCHOOLFIELD: Still, we have the evidence, very strong presumptive evidence, so that I believe in this case, if the patient had not been improving, you would have recommended operation and made a presumptive diagnosis of tubal pregnancy. I do not believe it is possible to make a positive diagnosis of tubal pregnancy without section. I did not mean to give the impression that it was positively a tubal pregnancy, but I gave the case for what it was worth, with the evidence and the symptoms.

In regard to the removal of the opposite tube, as I stated in my paper, I believe, as Dr. Palmer has stated, if there is evidence of a gonorrheal condition, and unless the parties themselves are anxious for offspring, the safest plan is to remove it. But there are many cases that have no evidence of gonorrheal infection. In the case I reported, there was certainly no gonorrhea present. If any of our patients can be said to be virtuous, I believe those were. In the other case I am not certain of it.

Now, as to leaving the placenta. In that case there had been no infection. We removed a portion of the placenta, that was perfectly loose and could be removed, but not a very great portion of it, and in trying to remove another portion of it we started up a hemorrhage that evidently would be very serious if we went further.

DR. PALMER: How long was that part of the placenta coming away?

DR. SCHOOLFIELD: From June until September.

DR. PALMER: You washed it out?

DR. SCHOOLFIELD: Every day a new gauze was packed into the sac and it gradually took care of itself.

DR. RICKETTS: In the attempt to remove the placenta, in the experience I had, after getting one-third down the hemorrhage was quite severe, but getting further down the hemorrhage stopped.

DR. SCHOOLFIELD: But what can you tie there? It is an oozing surface that is pouring out blood that you cannot control and that makes the hemorrhage more dangerous than ordinarily.

DR. RICKETTS: When I started my hands to sweep around the placenta it

bled like everything, but I cut it out and then sponged it out and the hemorrhage was controlled. Then I was convinced the best way is to turn the placenta out, just as in hemorrhage from the placenta in the uterus. Even in these cases you have a contraction of tissue, if you will clear the placenta out and give it a chance to contract.

DR. PALMER: Was it a tubal case?

DR. RICKETTS: Yes, sir.

DR. SCHOOLFIELD: There is not a contracting organ to control the hemorrhage in these cases, is the point. It is difficult to control the hemorrhage when you have not any place to put the pressure.

Gall-Stones.

DR. RUFUS B. HALL: I have in these two small bottles some gall-stones, and as this society deals with abdominal surgery as well as gynecological procedures and obstetrics, I thought the presentation would be proper. The specimens that are not broken up were in the gall-bladder; the others were encysted in the cystic duct. They were removed by a sharp curette, and were broken in getting them out.

The patient, aged thirty-two, was the mother of two or three children, and had been a sufferer from obscure abdominal pain for a number of years. Various things were believed to be the cause of her pain and sickness. The diagnosis of gall-stones was not made until a day or two before the operation. During her last illness she had fever and sweats; finally, a tumor was discovered in the region of the gall-bladder.

Operation revealed there had been no communication between the hepatic and cystic ducts for a number of months. When suppuration took place the gall-bladder enlarged to the size of a closed hand. Two or three small stones were encysted in the cystic duct. From inflammatory exudation the tube was closed on either side of them. It was not a difficult task to remove these. The operation was a cholecystotomy. I had considerable trouble trying to establish communication between the hepatic and the cystic duct. I finally established it and the flow of bile became free. Only

one dressing, the first, was stained with bile. The house doctor said that while I was away on my vacation the sinus all but closed. This finally closed and the patient felt well. After a week or two she had some pain, and the wound opened and discharged some muco-pus. She came to my office and gave me an opportunity to try to open it by probing. I took an ordinary uterine sound, and after a little manipulation had bile running all over the side of the abdomen. In a few days the external sinus healed and the patient ceased to bother me.

In cholecystotomy, if you cannot establish communication with the hepatic duct, you will have trouble with a distended gall-bladder afterwards. I had made up my mind to have the patient undergo another operation if I could not establish this communication. My other operation would not be cholecystenterostomy. I would excise the gall-bladder.

Fibroid Uterus with Attached Appendages.

DR. C. L. BONIFIELD presented a specimen of fibroid uterus with attached appendages, and made the following report of the case:

Miss T., aged thirty-five. Menstruation began at eleven years. Flow moderate, lasting three or four days; always painful. Seven years ago she was in Christ Hospital, under the care of Dr. Geo. E. Jones, for nervous prostration and dysmenorrhea. He dilated the cervix. General health improved under treatment, but menstruation remained painful.

In August, 1896, she was compelled to take violent exercise during the menstrual period. She suffered greatly at this time, and a few days later she had a peculiarly miserable sensation in the dorsal region of the back, extending up to the cervical. At the same time she noticed a tendency of the left foot to drag when walking. This soon disappeared, but returned the next menstrual period. It kept returning with each menstrual period, lasting longer each time, until the use of the limb was almost entirely lost. She observed that after taking an enema while the bowel

was distended with water she could walk better.

Last winter she was confined to bed eight weeks on account of the distress in her back. After this she could use her legs somewhat better. Menstrual flow has increased for the last two years, and for the past few months has lasted from ten to fourteen days. Menstruation in July lasted but a few days, and since that legs have not been so well.

She was operated on August 19, and this specimen removed. Convalescence has been satisfactory and the prospect of complete recovery good.

DISCUSSION.

DR. RUFUS B. HALL: I wish to make a few remarks in regard to this specimen of fibroid. A portion of this specimen would occupy the true pelvis and the pressure of the broad ligaments would fix it. While it was not fixed by adhesions, it was fixed by the supra-abdominal pressure. It pressed on the nerves and caused the symptoms in the legs. Three or four years ago I reported a similar case in which the tumor resembled two cocoanuts lying side by side. One of these masses filled the true pelvis and was adherent by inflammatory exudation. That patient suffered the same reflexes, only in an exaggerated manner, as the one narrated to-night, plus a pain on the top of her head. The pain in the legs was at once referred to the head. She suffered more from the pain in her head than from the pain in the legs. It was a question, before operation, whether that patient was not a subject of locomotor ataxia. She is now well, and I doubt not at all the doctor's patient will have all her symptoms disappear and will get well. It is a beautiful specimen; the patient deserves to get well.

But the doctor will quit using silk for ligating the vessels below the peritoneum. The ovarian arteries he can tie in this way all right, but he will quit tying the uterine arteries with silk. We will all quit it. I am quite certain I have quit it, never to commence any more. The silk becomes infected, just as silk-worm-gut and wire is infected in the Bassini operation. The surgeon cannot

do surgery differently in the abdomen than in any other part of the body. Men who are keeping abreast of the times are ceasing to use silk in the Bassini operation because too many cases come back with sinuses.

DR. SCHOOLFIELD: Would you recommend cat-gut for tying the uterine artery?

DR. HALL: Doctor, I am not willing to put myself on record as to what I would recommend. I said in a paper recently, that we must quit this operation or we must change our technique. If we make total extirpation, tying with silk, we must leave one end of the ligature long and close the peritoneum over it, or if it is desirable to leave the cervix, we can cut a hole back of it and bring the ligatures out in that way. I believe we must use some animal ligature, and I believe the kangaroo tendon is the best. The technique is not yet completed, and will not be completed for several months.

DR. EDWIN RICKETTS: This is one of the cases in which Richelieu and Peon would advise removal by morselmon. I am quite certain that any of our French operators would have removed this specimen per the vaginal route, and they would never have a ligature to bother them afterwards, and ligatures are an objection, as stated by the last speaker. I would like to know if he has any suppurative process to deal with in this some six months or a year from this time. With a set of instruments for the removal of such tumors by morselmon, and going at it from below, you could very easily split that tumor longitudinally, after the clamps are put on the left, and it could be done very quickly. The French surgeons claim that we have risks as to hernia following abdominal section. They are right. They claim that the ligatures are an objection. We have here Dr. Hall's experience, which is valuable to us, which shows eleven sequelæ to deal with following Baer's operation. I want to say the time is coming, and it is not far distant, when the members of this society will remove this sized tumor by morsemon, and I believe in tumors not larger than these the result will

be better than following the Baer operation.

DR. HALL: How would you do in a virgin, small and fat, like this one?

DR. RICKETTS: These men even do it in virgins when they have to make an incision to get at it. It is commendable on the line that you do not have the suppurative processes to deal with in the stump.

DR. HALL: But you have a suppuration with the clamps, which is worse.

DR. BONIFIELD: When I was in Philadelphia, in attendance at the meeting of the American Medical Association, I was told by one of the most prominent operators of that city that Jacobs operated on a case in his hospital while in this country, and that the recovery was by no means without pus. This gentleman also remarked that a friend of his had been abroad recently, and had learned that Jacobs, after his return from America, was employing the abdominal route much more frequently than he had been doing.

In a woman with a larger vagina and a small tumor, that is the proper route. But the time will never come when I would choose that method in such a case as this. As Dr. Hall has said, we know the peritoneum will take care of silk and other tissues will not. If we sew the kidney up with silk, a large part of it is in connective tissue and will not be absorbed. This is the reason such cases so frequently have subsequent trouble from the silk. Last winter I removed a fibroid uterus at the Good Samaritan Hospital. Years before I had removed its appendages to stop its growth, using silk as ligatures, and I could not find a vestige of the silk present; it had been absorbed. Dr. Baer himself made the point in discussion that that was an objection to the separation of the uterine and ovarian arteries and tying them by themselves, as Dr. Baldwin, of Columbus, had recommended. Dr. Baer advised leaving the ligature within the peritoneum, and he sticks to his original technique, and claims if we follow that we will not have trouble with the silk. I have had some trouble with silk in other cases, as Dr. Hall says I will have in this case, and therefore I close the

cervix and prefer to close the pelvic peritoneum with cat-gut. But I do not feel like tying the vessels with cat-gut.

DR. HALL: This was an ideal case in many respects for operation. How would Dr. Baer or anybody else include the ovarian artery and the uterine artery in the same ligature? They are some distance apart. The doctor contended that it may be done in the majority of cases. It may be done in Philadelphia, but it cannot be done here in the class of cases we have to deal with. If you could have both the ovarian and uterine included in a ligature, you would never hear from the ligatures, because they would become encysted.

DR. BONIFIELD: The advantage in tying the uterine artery by itself after stripping the peritoneum down well in front and pushing it aside and isolating the artery, is that you absolutely know you have not a ureter. When you include the peritoneum you have to simply tie it in the dark, trusting to your knowledge of where the ureter ought to be. You must choose the lesser of two evils. If the tumor extends well down into the pelvis and involves the cervix, you cannot be sure as to whether you are tying the ureters without exposing them. But I do not believe the ureters were in danger in this case. In each case the operator must be governed by what he thinks is best. I believe infection of ligatures comes largely through the cervix. I think in the very great majority of cases the cervix treated as I have described will grow together and effectually prevent infection from below, and the ligatures, if surrounded by peritoneum, will disappear without causing the slightest trouble.

DR. J. BERRIEN LINDSLEY, one of the most prominent physicians of Tennessee, died at Nashville last month aged seventy-eight years. Dr. Lindsley was secretary of the State Board of Health and treasurer of the American Public Health Association. He was also a D.D.

A PILL containing half a grain of sulphate of copper frequently restrains the diarrhea of phthisis.

ACADEMY OF MEDICINE OF
CINCINNATI.*Meeting of January 3, 1898.*The President, W. E. KIELY, M.D.,
in the Chair.

W. EDWARDS SCHENCK, M.D., Secretary.

DR. DAVID DEBECK read a paper
entitled*Ossification of the Choroid*
(see p. 181).

DISCUSSION.

DR. S. C. AYRES: There is a great deal of mystery surrounding why bone should develop in the choroid, but it usually occurs in eyes that have been blind for years, and is easily recognized by its resistance, and in other instances by pressure upon the ball eliciting pain. I recall a little child whose eye was injured by a piece of glass—bone developed in that eye in a year.

DR. T. A. CHRISTEN: Ordinarily the ossification is not suspected, but is found after the removal of the eye. I recall one instance that from the fact that violent attacks of pain would occur in the eye from holding the head in a certain position led me to believe the same was caused by pressure of a bony plate upon the ciliary nerves. This is an interesting subject, and, as has been said, we are still in the dark. It probably must be due to some altered condition of the secretions. In all eyes that I examined I have never found it to involve more than the choroid, and in no instance have I found it on the posterior wall of the iris. I do not know if the choroid is its specific locality.

DR. LOUIS STRICKER: The essay of the evening is certainly worthy of high commendation and praise, and leaves really nothing to be said, the subject having been so completely covered.

In reference to what has been said, "that bone is only found in the tissue of the choroid," I have specimens which show bone developed within the capsule of the lens. Of course, in these cases the capsule has been opened and has given access to connective-tissue corpuscles. These in their turn have undergone a change, becoming osteo-

blast, and thus giving rise to true bone. It could not be otherwise, for the cells which line the capsule are of epithelial origin, and cannot lead to formation of osteoblast, these latter being of mesodermic origin, to which class of tissue the connective-tissue cells likewise belong.

I agree with the essayist in that this condition follows an inflammatory process with large quantity of exudate, which subsequently undergoes a formative bony process. And it is astonishing how rapidly this can take place. The cause is unknown, and it may occur in the young as well as the old. Becker reported a case where bone developed within the capsule of ruptured capsule of the lens within a year after a trauma. Syphilis does not seem to be a factor in producing this condition, any more than any other condition of the system which produces a chronic inflammatory process in the eye.

Trauma and Carcinoma.

Dr. H. Bergen, in the *Vierteljahrsch. f. ger. Med. u. öff. Gesundheitspf.*, concluded a discussion on the subject to the effect that the proper cause is still doubtful. Trauma is a predisposing cause of carcinoma, it furnishes the tendency or decides the spot. The objections brought forward against this view do not hold good in the light of evidence. The trauma is more likely to be a repeated than a solitary one. Long acting traumata have a special tendency to determine the disease in the old or aged. In a practical determination not only the purely causal relation of injury is to be considered, but also the influence furthering the development. In the development of carcinoma after accidents, a certain etiological importance must be credited to the trauma. In the individual case in insurance cases particularly, this connection must be worked out and put on a firm basis. In proving a connection between an injury and carcinoma there must be an unbroken chain between the two, of which every successive link proceeds from the one before it.—*Berlin Cor. Med. Press and Circular.*

Selections.

FROM CURRENT MEDICAL LITERATURE.

General Conclusions Regarding Epilepsy.

At the close of the debates of the International Leprosy Conference, Berlin, 1897, the secretaries presented the following short report of the general conclusions of the conference:

They believe that such a *resumé* will be especially desirable for those members who have been delegated by their respective governments, and who have to make reports on the results of the conference.

As might be expected, a considerable portion of the discussion has related to the bacillus *Lepre*, which the conference accepts as the virus of leprosy, and which for upwards of twenty-five years has been known to the scientific world through the important discovery of Hansen and the able investigations of Neisser.

The conditions under which the bacillus grows and develops are still unknown, as well as the way of its invasion into the human system; but from the discussions of the conference, it seems probable that an unanimity of opinion will soon prevail in reference to its modes of subsequent dissemination within the human body.

Very interesting observations have been brought forward in connection with the elimination of the bacilli in large quantities by means of the skin and the nasal and buccal mucous membranes of lepers; it is desired that such observations be confirmed where opportunities occur.

The question is of very great importance to those who are entrusted with the care of the public health, as leprosy is now acknowledged to be a contagious disease.

Every leper is a danger to his surroundings, the danger varying with the nature and extent of his relations therewith, and also with the sanitary conditions under which he lives.

Although among the lower classes, every leper is especially dangerous to his family and fellow workers, cases of leprosy frequently appear in the higher social circles.

The theory of heredity of leprosy is now further shown to have lost ground, in comparison with the at present generally accepted theory of its contagiousness.

The treatment of leprosy has only had palliative results up to the present time. Serum therapy has so far been unsuccessful.

In view of the virtual incurability of leprosy and the serious and detrimental effects which its existence in a community causes, and considering the good results which have followed the adoption of legal measures of isolation in Norway, the Leprosy Conference, as a logical issue of the theory that the disease is contagious, has adopted the following resolution proposed by Dr. Hansen and amended by Dr. Besnier:

1. In such countries, where leprosy forms foci or has a great extension, we have in isolation the best means of preventing the spread of the disease.

2. The system of obligatory notification, of observation and isolation as carried out in Norway, is recommended to all nations with local self-government and a sufficient number of physicians and health officers.

3. It should be left to the legal authorities after consultation with the medical authorities to take such measures as are applicable to the special social conditions of the districts.

Ichthyol in Pulmonary Phthisis.

Branthonne (*La France Med.*, November 12, 1897), while still convinced that good air and nourishing food should form the basis of treatment of consumption, believes that we have in ichthyol a remedy of peculiar efficacy in retarding, and, in some instances, totally arresting its progress. Numerous illustrative cases are offered in confirmation of this view. The good effects are shown by a diminution or arrest of the fever, amelioration of cough, lessening of expectoration, increase of appetite, a gain in the body weight and a general

feeling of well-being. The night-sweats yield more slowly than the other symptoms, but these too often cease in favorable cases. The drug is not contra-indicated in hemorrhagic cases; on the contrary, attacks of hemoptysis have appeared to become less frequent and to disappear under its use. Even in phthisis florida, or galloping consumption, the author found ichthyol to exert a useful influence in checking the symptoms and apparently prolonging life. The substance is by no means offensive to the stomach, but has a salutary influence on that organ, appearing to assist digestion and to promote the appetite. Sach, of Heidelberg, believes that ichthyol possesses a more or less evacuant influence on the bowels, but no effects of this kind were apparent in the cases here reported. Branthonne prescribes the drug as follows:

Ichthyolate of ammonia, grammes 10
 Alcohol (65 per cent.), " 20
 M. S.—Thirty drops in a glass of water
 two or three times a day.

Increase by two-drop installments until 150 drops daily are taken. Continue in these doses.—*Post-Graduate*.

Medical Popes.

Several of the Roman Pontiffs were students of medicine in their youth, and others seem to have prescribed even during their pontificate, as Pius IV, who, with poetic justice, was Cardinal de' Medici, and Nicholas V, the learned Pope of the fifteenth century. One pontiff, however, was a qualified doctor according to modern ideas, and wrote medical works. This was John XXII, who reigned (1316 to 1334) at Avignon. He was born at Cahors, and seems to have studied at Montpellier under Bernard de Gordon, author of the once famous *Littum Medicinæ*. It is at least certain that the Pope, then Jacques Duèse, was at Montpellier. He wrote afterwards treatises on gout, eye diseases, the preservation of health, and the development of the fetus, for embryology was studied as early as the thirteenth century. To the last Duèse wrote on medicine. Early in the fourteenth century he received the tiara, and died at the age of ninety. No doubt he

knew how to preserve his health as well as how to write on the subject, though other authorities on sanitation have not always been consistent. Unfortunately, the *Chronique Médicale* shows that he had failings to which the most worldly might well take exception in a priest and a doctor conjoined. Cardinal de Via died rather suddenly, and John XXII suspected one Géraldi of poisoning His Eminence. Géraldi was found guilty "by order of the Pontiff," dragged through the streets of Avignon at a horse's tail, and finally flayed alive. This affair, our contemporary notes, with some reason, was a blot on the name of John XXII, whose life was in other respects so brilliant; indeed, it has been said that as the founder of the University of Cahors in 1332, if for no other reason, he should be blessed. To this panegyric Géraldi and our profession might demur. Let us trust that Pope John was gentler to his patients than to his flock.—*British Med. Journal*.

A New Local Anesthetic.

A. Einhorn and Heinz (*Münch. med. Woch.*) describe the new synthetic local anesthetic, orthoform. This body is a white, light powder, without smell or taste. It is only partially soluble in water, but enough is brought into solution to make the fluid anesthetic. It combines with hydrochloric acid, forming a very soluble compound, which cannot, however, always be used, as it irritates some mucous membranes, such as the conjunctiva. Anesthesia is only induced in the places with which the orthoform comes into contact. Orthoform acts as an anesthetic wherever it comes into contact with nerves, and thus it has no effect when applied to the unbroken skin. If it be applied to a burn of the third degree, the anesthetic effect is remarkable. It also allays the pain of ulcers, whether cancerous or other. In one case as much as fifty grammes was sprinkled on a wound within a week, showing that it is quite harmless. It is strongly disinfectant, hindering decomposition and fermentation. Orthoform was also useful in ulceration of the larynx; after some of

the powder was blown in the pain was relieved for twenty-four hours. In gastric ulcer and carcinoma it was also of service, but much less so in chronic gastric catarrh. For external use the free orthoform is the best, but for internal use the soluble acid salt. Further observation is needed in regard to its action on the mucous membranes of the mouth, nose, and naso-pharynx. As it is non-poisonous, it can be applied to large ulcerating surfaces. Internally, one-half to nineteen of the hydrochlorate has been given several times in the day. Orthoform is stable, non-hygroscopic, and can be added to other remedies.—*Indian Lancet.*

GÁROFEN.—(Condensed from an article in the *Medical Summary* by Dr. Ben Brodnax, Brodnax, La. Name of product changed from Guranla to Gárofen):

After trying a preparation called Gárofen I thought some of my brethren would like to know of a pleasant pain reliever. Some time ago I received a sample of the remedy from the Phénique Chemical Co., of St. Louis, Mo., but

as I had a supply of other material, and not many cases requiring the effects, I put off testing it until I had a case of sick headache. I watched the effects of one tablet every half-hour, with the result that the second tablet gave relief, and after the third the patient slept well. There was no diaphoretic effect from it, and no after-effects that were unpleasant. The lady woke up as from a natural sleep. In a case of uterine pain from suppressed menstruation the effects were immediate, and after five tablets—one every half-hour—there was perfect ease. I had used nacrotils (B. Keith & Co.'s concentrated tincture) for a day or two, and continued the same for several days after the flow commenced. I have also used gárofen in several cases of measles in people over forty years old, with the effect of quiet sleep and much comfort to the patients. I cannot but think it is the hypnotic which will take the place of morphine, acetanilid and its many compounds and mixtures. It answers a splendid purpose where you desire to allay pain without any sweat, or any of the effects of heart action with which the coal-tar preparations are charged. As a quieter of pain, pure and simple, I have found nothing superior to it outside of a hypodermic of morphine. I dread the use of morphine among *clients*, and have for several years tried everything that would in any way supplant it. This preparation, I believe, comes as near to it as any that I have used.

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Original Articles.

DIPHTHERIA AND DIPHTHERIA.

BY G. B. TWITCHELL, M.D.,
CINCINNATI.

Diphtheria is a disease that we always have here in Cincinnati. Judging from the health reports it is a very common disease. For years it has not seemed to be particularly fatal, and yet epidemics have occurred and do occur in which the mortality is very high, even to 90 per cent. These epidemics occur especially in the smaller towns, where the population is comparatively scattered. We have every reason to believe that the disease which we have constantly with us, and which is comparatively mild, is identical with this frightful scourge which occasionally decimates the children of some town or village.

Bretonneau, of Tours, was the first to recognize the specificity of the various forms, and modern bacteriology to a large extent tends to sustain him.

In no other disease, except perhaps typhoid fever, do we have this varied picture. Given a town of the size of Cincinnati, with the same number of cases of whooping-cough or measles or chicken-pox or small-pox, and we would have a number of local epidemics, if not a general infection. Yet year after year we have been having about the same amount of diphtheria in the city, and no sign of an epidemic. This is not and cannot be due to efforts at quarantine.

A few years ago a solitary case of

small-pox landed in this city, and, despite the most prompt and vigorous efforts of the sanitary authorities (and they were well directed, too), about 130 new cases developed. The efforts to stop measles by isolation are like Mrs. Partington's fight against the Atlantic Ocean. And so we must not consider isolation as having much if anything to do with the fact that we have not constantly on hand an epidemic of diphtheria.

I have said that the only other disease having any real similarity to diphtheria in this respect is typhoid fever. Of course, all contagious diseases, and especially scarlet fever, vary greatly at different times in severity, but they always occur either in greatly isolated cases or more commonly in epidemics, which may, of course, be quite local. Typhoid fever, on the other hand, is a disease that we always have with us. Usually the cases are mild; here and there, as in diphtheria, a severe case is seen, but when an epidemic occurs the mortality, while it may never reach the height it does in diphtheria, is often truly frightful. And, just as in diphtheria, these severe epidemics occur most commonly in the small towns.

While other infectious and contagious diseases (notably perhaps scarlet fever) vary in severity at different times, these two stand alone in the peculiarities mentioned; and while variations in virulence in diseases may be explained generally in the varying virulence of the specific germ, in diphtheria at least we must take into account the fact that the extremely virulent cases are cases of mixed infection; and, moreover, these mixed infections are the ones that occur in epidemics, while the comparatively pure diphtherias rarely if ever do.

¹ Read before the Academy of Medicine of Cincinnati, January 17, 1898.

So it is that a predisposition of time and place very materially alters this disease, as it does typhoid; and, indeed, it would seem that, above all other things, the sanitary condition of the place has much to do with the development of virulent forms of the disease, which accords with the clinical conception of diphtheria.

Allowing even for a decided variation in the virulence of the specific micro-organism, we must admit that the virulent cases are nevertheless cases of mixed infection, and that under certain unknown circumstances, in epidemics especially, mixed infections are more liable to occur, almost as if at certain times the specific organism invited extra infection, while at other times it did not. And, indeed, this is not purely imaginary, for it is not uncommon to find all through life that certain species flourish best in the presence of certain others.

While it is not my desire to go into the details of the clinical history of the various forms of this disease, there are certain points that, for all that they have often been discussed, will well bear a little more attention, and perhaps one of the most important of these is the method of the infection of the patient. That the Loeffler bacillus is the cause of diphtheria has been very firmly established, but often to the clinician the co-existent pus-formers and putrefactive organisms are of as great importance, for the clinical features of the disease he has to fight depend upon all. As to how these organisms, and especially how the bacillus diphtheriæ infects the human body, is a very important question, and brings up naturally the question as to the contagiousness of the disease.

Diphtheria has by all writers since Bretonneau been classed as a contagious disease, and by some as a very contagious disease. The mere fact of its having as a cause the infection by a specific organism does not make it contagious in the strict sense of the word, any more than the same would make typhoid fever or pneumonia contagious. That it is contagious by direct contact, just as syphilis, gonorrhœa or the pus-formers

are, cannot be doubted, but it becomes a very difficult matter to establish for it a contagiousness in any way similar to that of measles, chicken-pox, small-pox and whooping-cough. I have often seen a single case of diphtheria develop in a single room of a tenement-house and make good headway before any effort was made to isolate the patient from its playmates, and yet it has never been my fortune to see more than one case in a family at a time. A little inquiring among my neighbors, and especially among such as have had wide experience in the treatment of this disease, had developed that few if any have had any experience that would justify them in claiming it to be contagious. Cases are on record—too many, indeed—where there have been several deaths from the disease in one family in a short time, but in these cases the disease has often developed in all at so nearly the same time that it seems more rational to suppose that all received the disease from one source than that one was received from another.

There is one fact that perhaps more than any other points out the uncertainty of the contagiousness of diphtheria, and that is that while in most other contagious diseases a definite period of incubation has been made out, this is not true for diphtheria. Many writers do not attempt to fix a period of incubation. It is not uncommonly fixed at from two to eight days. Osler says: "In the cases of accidental inoculation the duration is from two to three days." Undoubtedly he means inoculation by direct contact. Possibly this statement then is correct, but he goes on to say that when the disease is contracted in the usual way the period is from seven to twelve days. It will appear from this that the "usual way" means either that only a very few bacilli are inoculated and propagate slowly on account of the few, or that the disease in this instance is first general and then becomes local. The uncertain value of such statements is very apparent, to say the least.

The question as to whether diphtheria be a local or a general disease is an idle one. To the clinician it is always a general disease, and this is es-

pecially true of the virulent form so often seen in epidemics. Trousseau makes quite a sharp distinction between the two forms, and, aside from the fact that the malignant form is likely to be epidemic while the comparatively mild one is sporadic, is inclined to consider ordinary diphtheria a local disease, killing when it does kill by suffocation, and the malignant form a general disease, killing by sepsis. At the present time in this country this distinction is, if anything, more marked. Taking the ordinary run of diphtheria, exclusive of laryngeal cases, and we will find clinicians who have seen case after case get well, even without the use of antitoxine; and, moreover, many of these cases never present any definite symptoms of general poisoning, such as diphtheritic paralysis or protracted anemia. Now the claim will be made that many of these cases are not diphtheria. This may be, but many undoubtedly are, and, as will be shown later, the bacteriological proof that they are or are not lies beyond the limits of practical possibility. It is much better and safer to accept these on the often well-known diagnostic ability of the man in charge.

Every man in general practice has noticed that cases of pure laryngeal diphtheria, and even cases in which the trachea and perhaps bronchi are affected, are never accompanied by the typical toxic symptoms of diphtheria. In these cases death occurs from mechanical obstruction, or, what is the same in a different form, lobular pneumonia. Yet these are diphtheria; as a matter of fact it is easier to find the Loeffler bacillus in the membrane from the trachea than in any other place, for here we find comparatively pure growths. I do not believe that a membranous laryngitis other than diphtheritic often, if ever, exists. Of course, some cases are much less virulent than others, and, of course, other inflammations and edemas above or immediately below the vocal cords may occur and do occur, and often prove fatal.

The malignant form of diphtheria which may occur sporadically, but is typical of epidemic diphtheria, is undoubtedly a mixed infection, but what

is remarkable about it is that the poisoning power of each kind of organism seems to be heightened in this condition. In the past the great majority of these cases died of sepsis, and in those that recovered renal complications and paralyses were very common. These complications are very rare in laryngeal diphtheria and mild pharyngeal cases—that is, in pure diphtheria.

There is one other point in the clinical history of diphtheria that may have some bearing upon the etiology of the disease, and that is its slow and insidious development. I do not believe that I have ever been called to a case in which I did not get a history of the patient being sick for four or five days or a week before sending for me, and I have several times attended children several days before any membrane became apparent in the pharynx, or laryngeal symptoms became severe enough to indicate the true nature of the disease.

In view of the fact that in diphtheria we have a disease that is contagious by direct contact at least, and especially in view of the fact that we have almost a specific for the cure of this disease, an early and correct diagnosis is a matter of great importance. That a diagnosis by signs and symptoms alone is subject to error has long been recognized. A few years ago it seemed that a speedy and certain method of diagnosis was to be had in the rapidly growing cultures on the Loeffler blood serum, but the more accurate work of recent years has shown even this method valueless to the practitioner. In the first place, this method, unless combined with experiments upon animals, does not always distinguish the true bacillus from the pseudo-bacillus.

Kruse, in the last edition of Flügge on "The Micro-Organisms," says that without exception this animal experiment must be made, for it has happened to him and others that further experiments have shown what was supposed to be typical diphtheria to be absolutely without effect on the animal, and consequently pseudo-diphtheria.

In the proceedings of the Fourteenth Congress for Internal Medicine, Wiesbaden, 1896, Hennig, of Königsberg,

takes a very decided stand against bacteriological methods having any value in the diagnosis of diphtheria. In his experience Esmarch made the bacteriological investigation, and often found diphtheria bacilli in cases that ran the course of lacunar tonsillitis. But perhaps, after all, some of these were really diphtheria.

However, such mistakes on the part of the bacteriologists, while they are very annoying, do comparatively little harm, and, moreover, must be considered excusable until the question of the relationship to each other of the various bacilli of the diphtheria group is finally settled, for as yet it is not known whether the pseudo-diphtheria bacillus is a true species or only a variety of the Löffler bacillus.

A much more common and much more dangerous error is in not finding the bacillus. In Hennig's first series of cases, out of twenty-seven negative cases examined over and over again by Esmarch, eight developed diphtheritic paralyses.

It is easy to understand how a single examination might fail. The best place to find the bacilli is in membrane from the trachea, not very easy to get. Mucus from the tonsils and contaminated membrane from the pharynx is much more difficult to investigate, and still this is what must be used in these investigations. And yet too often a diagnosis is founded on a single often carelessly made culture from such material; moreover, the more malignant the case the greater the liability of error.

A complete bacteriological investigation, however valuable it may be to medical science, is valueless to the physician in attendance, for it must necessarily take several—perhaps many—days. An incomplete examination is not only valueless, but positively dangerous, in that it may give a false sense of security. And while a clinical diagnosis may often be a mistaken one, in this instance the mistake almost invariably occurs on the safe side.

The diagnosis of diphtheria cannot be made before the appearance of the membrane. Nothing is more difficult than to tell how to make a diagnosis.

A man hesitates in making his first diagnosis of small-pox, for all that he may be able to describe the eruption perfectly. In a typical diphtheria, when well developed, the diagnosis is easy, but as the diagnosis should be made early difficulties may occur. When the exudate from a follicular tonsillitis coalesces it may resemble a diphtheria, but it can usually be wiped and not stripped off. A definite patch situated on a deeply congested area ought always to be considered diphtheritic unless clearly proven otherwise. Patches on the uvula and soft palate are very characteristic of diphtheria, and should receive careful thought even before they are definitely membranous.

Very important in the diagnosis of diphtheria is the history of a slow onset. It has seemed to me that a history of a period of malaise four or five days preceding the appearance of throat symptoms, or at least preceding the time they were first noticed, is almost invariable. I have known cases of diphtheritic croup to be a little sick and occasionally a little hoarse for a week before any alarming symptoms appeared, and then they came on very gradually. Combining the appearance of the throat and the sound of the breathing in cases of croup with such a history, diagnoses can be made accurately and sufficiently early for treatment.

When we come to discuss treatment we enter, indeed, a fascinating field. Antitoxine, for all that it has been often and thoroughly discussed here, can stand a little more from the standpoint of diphtheria and diphtheria. How will it act with the almost necessarily fatal malignant diphtheria of Bretonneau and Trousseau? Antitoxine should be given early. We often hear of its administration on the first or second day of the disease. As a matter of fact, I do not believe that it is often given before the fifth or sixth. It has seemed to me that the only effect of antitoxine is its rapid and permanent removal of the membrane. Now if the principal danger of the disease consists in the membrane, antitoxine will be of value at any stage, providing the membrane has not already done an irrepa-

rable damage. When the membrane is thus removed the possibility of a further poisoning of the patient by diphtheria germs ceases. The poisoning that has already occurred is apparently unaltered. Paralysis does occur even after the use of antitoxine.

The most brilliant successes of antitoxine are to be found in the treatment of membranous croup. Here we have rarely anything to make trouble except the mechanical obstruction of the membrane itself, and consequently the only problem to solve is to keep the patient alive, by intubation or otherwise, for forty-eight hours after the administration of antitoxine, regardless of whether it be administered early or late.

The early administration of antitoxine, in pharyngeal cases, will avoid paralysis and save lives, but I sadly fear that in malignant cases, such as we fortunately rarely see in this city, in which the symptom complex is made up of severe diphtherial and severer septic symptoms, that antitoxine will give too little help to save many cases. After an epidemic has started and physicians are on the watch for cases, it may perhaps be used early enough to save.

Too often other treatment is suspended after the use of antitoxine. For all that we may wish to give all credit to antitoxine, a higher duty requires more help to the patient. My success with mercury before the time of antitoxine has led me to use it just as freely now. Beyond this use stimulants—whisky and strychnine. Local applications have seemed to me useless and cruel. By forcing the use of swabs you are wearing out a strength in your patient that may be very precious in the later stages of the disease. The Loeffler solution I have never used, but I have seen a child with its lips and tongue horribly burned from the use of it. Of course, the burns occurred when the child struggled. I know nothing of this application except what the physician told me. He said it was hot. Little is gained by the use of such heroic measures. Of course, the mouth should be kept clean. Peroxide of hydrogen can often be used without discomfort, and,

better, bichloride of mercury can be swallowed in solutions strong enough to give decided local antiseptic effects. Teaspoonful doses of a 1 to 1,000 solution and stronger can be given every two to three hours without discomfort and with decided benefit.

No. 1616 Freeman Avenue.

[FOR DISCUSSION SEE P. 215.]

Primary Tuberculosis of the Rectum.

Straus publishes an interesting article on this subject in *Mathews' Quarterly Medical Journal* for January, 1898. He reaches the following conclusions:

1. That primary tuberculosis of the rectum is not so infrequent as some of the leading authorities have taught.
2. That it is a surgical disease as much as is appendicitis.
3. That it is not and cannot be diagnosed by the clinical symptoms as given by the various writers on diseases of the rectum.
4. That the only scientific and correct way of making a diagnosis is by the use of the microscope.
5. That by thorough curettement or excision, or both together, with cautery, it is not only cured but remains cured much more often than is dreamed of; certainly more often than the teaching of the authorities would have us believe.
6. That some of the apparently most hopeless cases are cured by repeated operations.
7. That all suspicious cases should be submitted for microscopical examination, for the reason that it is the only scientific method of arriving at a diagnosis.
8. That local treatment is not equal to curing these cases; permanent results are to be had by a radical destruction of diseased tissue or the habitat of the tubercle bacilli.
9. That these cases are and have been cured, and that sufficient time has elapsed for us to conclude that they will remain cured.
10. That early and repeated operations if need be are imperative, if these cases are to be permanently cured.—*Therapeutic Gazette*.

DIPHTHERIA.

BY E. G. DAVIS, M.D.,
LEWISTOWN, ILL.

So much has been written during the last few years on the subject of diphtheria and its treatment that to add what I have to contribute may appear to some of my readers to smack of supererogation. The series of cases which I wish to report embraces eight, all treated with antitoxine with the most satisfactory results, and is presented without apology. Two vital facts, than which none are better established, demonstrate the importance of clinical reports from small users of antitoxine, as well as from large users; and it is hoped many such will find their way into the medical press during the current year. The facts referred to are these: (a) Serum treatment has already reduced the mortality from diphtheria in the United States fully one-half (see Reports American Pediatric Society); (b) 114,031 deaths resulted from diphtheria and membranous croup in our country during 1896 (see Supplement, Public Health Paper, July 16, 1897). It is to be presumed that a considerable number of cases failed to be reported, and that some of the cases reported were, in reality, not diphtheria. The figures, nevertheless, show the prevalence of diphtheria in the United States and the possible gain in the saving of life from the more general employment of antitoxine, both as a preventive and a remedy in dealing with diphtheria and membranous croup. The total of deaths from this disease is made up largely from the reports of physicians who see only several cases in the course of a year, and have relatively few deaths to report. Such, as has been repeatedly pointed out, are less likely to be enthusiastic advocates of serum treatment than are physicians who have larger numbers with which to make comparisons. The following cases, it seems to me, are sufficiently conclusive:

CASE I.

On October 4, 1896, I was called to see Oram, the five-year-old son of a

farmer. He was found suffering with a mild form of diphtheria, and was the third member of the family to have the disease. Because the others had done quite nicely treated with the ordinary remedies, together with Loeffler's solution locally, I did not feel very uneasy for him. During the morning of the 6th, before I arrived, he developed "croup," as the parents informed me. I found on examination that there was a membrane forming in the larynx. In the evening of the same day I found all the symptoms more grave, breathing being greatly impeded. I sent for antitoxine and immediately gave 1,000 units, and repeated the dose the following morning. During the night he had grown very much worse, so that it seemed useless to give more antitoxine. However, I pushed stimulants to keep up his strength as best I could and gave the second dose. Twenty-three hours after receiving the last dose, during a fit of coughing, he threw out a membranous cast of the entire trachea and larynx. From that time on recovery was rapid and uninterrupted. Subsequent experience has fully convinced me that the dose in this case should have been 2,000 units. This would have doubtlessly sufficed, and resulted in a much earlier recovery.

CASE II.

On October 26, I saw Gertie, the seven-year-old daughter of a farmer, who was suffering with diphtheria. She was the fourth of the family to have the disease; the rest, being of mild type, had received the ordinary treatment. At first I had no particular fears for her, but, to my surprise, on my second visit I found the membrane had spread over both tonsils and now completely filled the posterior nares and pharynx. She was quite delirious and extremely weak. I sent immediately for antitoxine and injected 1,000 units. This was done on the evening of the 27th. She soon fell into a quiet slumber, the fever ran down, she perspired freely, and, when I saw her next morning, she was in every way better. Around the membranes was seen the "red line of demarkation." Within thirty-six hours

the membranes had exfoliated and the patient went on to a good and rapid recovery, in less than two-thirds of the time required by the other members of the family.

CASE III.

Elsie, aged fourteen years, was my next case. When called, November 6, she had been sick two days, and the membranes covered both tonsils and all the pharyngeal surfaces. Her breath was extremely fetid, the membrane having that dirty, washed leather appearance, some of it being fairly gangrenous. Unfortunately, I could not secure antitoxine until the evening of the eighth day, and then the patient was profoundly poisoned. My prognosis was very grave. However, within twenty-four hours after receiving 1,000 units "Potent Antitoxine," the membranes began to exfoliate, and I was enabled to dismiss the case cured on the 14th of the month.

CASE IV.

Grace S., nine years old, was attacked with membranous croup, November 14, 1896. Dr. H. had been called, but under his treatment she grew steadily worse. On the evening of the 17th, when she was thought to be dying, I was asked to see the case. We readily agreed regarding diagnosis, but Dr. H. was certain she would die despite all means of treatment. He was a bitter opponent of the antitoxine treatment, and seized every opportunity to use his influence against it. Upon the request of the family I assumed charge of the case, and immediately injected 1,000 units "Potent Antitoxine" and administered stimulants to sustain her strength until the antitoxine had time to act. I succeeded in doing so, and in twenty hours, during a fit of coughing, she ejected an entire cast of the larynx and trachea, took a deep breath (the first good deep breath she had taken in four days), looked up in my face, smiled, and went into a quiet and restful sleep. She went on rapidly to perfect recovery. The membranous cast was immediately preserved in alcohol, and is now prized very highly, being

one of my most valuable specimens. It has been examined with interest by hundreds of persons.

CASE V.

December 27. Maleva, aged nine years, the second case in the family, her brother having had the disease some time before and having recovered under the ordinary treatment. She was taken on Christmas eve, but I did not see her till the morning of the 27th. A tough, shining membrane covered one tonsil, the soft palate and filled the pharynx. Her breath was not very fetid, and I saw no reason why she should not recover under ordinary treatment. (I see now where I made a mistake in not using antitoxine immediately.) She seemed for a short time to respond to treatment, but on the morning of the third day I found that enormous extension of the membrane had occurred. It now covered both tonsils and filled the nares. Her general condition was much worse. The heart's action was rapid and quite weak, and she bore on her face that peculiarly anxious expression which always gives warning of impending danger. She had a very irritable disposition, a dry, husky skin—in fact, the whole system seemed profoundly impressed by the diphtheria poison. I injected 1,000 units "Potent Antitoxine," but could see no improvement. My experience has taught me that this case should have received 2,000 units for the initial dose and the dose repeated in ten to twelve hours, if results were not noted. The better course, to be sure, would have been to have given antitoxine when the case was first seen. As it was, she continued to grow worse, and while helping her up over the vessel some two days later, death resulted from paralysis of the heart. I am convinced that had I used antitoxine twenty-four hours earlier I would have saved my case.

CASE VI.

Clare W., aged twelve years, was seen January 14, 1897. I found on examination extensive diphtheria patches on both tonsils. Upon my second visit, next day, the membrane was found

upon the pharyngeal surfaces also, and her voice was quite husky. There was a marked discharge of mucus from the nose, though I could not see any membrane in the cavities. The breath was somewhat fetid and she was quite nervous. Vividly recalling the last case, I determined to use antitoxine at once, which I did. Next day she was much better, and in three days her throat was clear of membrane and there was no fetor and no fever. Upon the fifth day after using antitoxine I dismissed her cured.

CASE VII.

Little Mae G., aged six years, was my next case. I saw her first on February 6, 1897, and found very high fever, marked irritability and large patches of membrane on both tonsils, uvula and soft palate. The following morning I found her in every way much worse—high fever, dry skin, fetid breath, enlarged glands—and the nurse wonderfully discouraged. The patient had not rested since I had last seen her, and during part of this time was delirious. I decided to use antitoxine immediately. She soon quieted after the injection, and slept well during the day and following night. The membrane rapidly exfoliated, and she was well enough to dismiss on the 12th of the month. She made a wonderfully rapid and good recovery.

CASE VIII.

Caroline, four-year-old daughter of Rev. W., of Lewistown, Ill., was taken with membranous croup October 10, 1897. Medical aid was summoned on the 11th, but, despite every effort, the child grew worse. On the 12th I was called to use antitoxine. In anticipation of my course of treatment the attending physicians quickly procured antitoxine, but, failing to work their syringe properly, succeeded in injecting only about half a bottle of "Potent No. 2" (1,000 units). In consequence the child continued to grow worse. Upon the request of parents and friends, I assumed the case, which was then declared hopeless. Twelve hours had then elapsed since the partial dose was

given and no improvement could be noted. I gave an injection of 1,000 units "Potent No. 2," with the result of improvement in every symptom within eight hours. Still feeling insecure, owing to the time that was lost after inaugurating antitoxine treatment, after ten hours I used still a third dose of "Potent No. 2." She now made wonderful improvement in every way, and on the evening of the 15th succeeded in dislodging the membrane, which she accidentally swallowed. It was passed in the stools quite intact the next day. She made a good recovery; the case was finally dismissed on the 16th of the month.

In all my cases, which now number eight, I employed Mulford's antitoxine, and have learned to have a decided preference for the product known as "Potent."

Treatment of the Pains of Ataxia by Methylene Blue.

It is stated in the *Journal des Praticiens* that Lemoine has found this substance of value for the relief of ataxic pains. In two cases he failed to obtain good results from its use, but in five out of seven others there was a great diminution in the intensity and frequency of the pains, the relief being complete and prolonged. The pains which seem to be best relieved by methylene blue are the darting pains in the limbs and the sensation as if a tight band were being drawn about the patient. He asserts that the effect of the methylene blue is very rapid and that the pain speedily disappears. In two or three hours the urine is colored blue. In this difficult class of cases Lemoine is of the opinion that methylene blue is one of our best remedies.—*Therapeutic Gazette*.

THE oil of sassafras will destroy all varieties of pediculi and their ova with a single application. Care must be taken to prevent its coming in contact with mucous membranes. Any burning from this cause can be allayed in a few minutes by pouring on olive oil.—*Med. Brief*.

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of January 17, 1898.

The President, W. E. KIELY, M.D.,
in the Chair.

W. EDWARDS SCHENCK, M.D., Secretary.

[TELEPHONE NO. 1981.]

DR. G. B. TWITCHELL read a paper
entitled

Diphtheria and Diphtheria
(see p. 207).

DISCUSSION.

DR. J. L. CLEVELAND: I thoroughly approve of the doctor's most excellent paper, which expresses my sentiments better than I could have done so myself. The point as to the mild character of the contagion as it exists here is well taken; also the malignant form he has represented, as we have all seen them. As we see this disease it is not as malignant as the text-books and reports from other localities would lead us to believe.

I cannot recall a single case where more than one child in a family was affected with this disease, yet several days elapsed from the onset of the disease before the doctor was called and the other children were exposed, yet in no instance do I recall that the other children took the disease, from which I am at a loss to determine how the disease is infectious. We probably are all agreed that it is contagious by contact; that if we take a piece of membrane from an affected throat and touch it to a healthy throat we have no doubt but what it will propagate and spread, so to me it appears that unless there is contact by kissing or using the same cup there is not so much danger of it spreading. It does not spread as measles does.

A singular thing that most of us have observed is the want of influence that sanitation exerts on this disease. Heretofore we have believed that where there were perfect sanitation and hygienic

conditions existing there we would not find the disease, but that is not the case, for often we find the most malignant cases under such conditions, and probably a milder form in the unsanitary tenements. In England it has become more malignant, though sanitary conditions have improved year by year.

Before the days of antitoxine we dreaded those cases requiring intubation, because we had doubts of their recovery; but now we have greater confidence as to the outcome of these cases when, in addition, antitoxine is used.

DR. J. M. WITHROW: I desire to pay the highest tribute to the paper of the evening. I have rarely heard a more thorough one, or any treatment of this subject which contains so much good sound sense. I must, in a general way, however, take issue with the statement that the contagiousness of the disease is somewhat questionable, as indicated by the fact that not often do we see more than one case in the same family. While this is true, we must bear in mind that every family physician takes immediate steps nowadays to isolate the patient and to keep every other member of the family from immediate contact with the afflicted one. The fact that there are outbreaks in institutions where there are a number of children is common knowledge, an evidence of the contagiousness of the disease in young life.

The question of sanitation I have been studying without satisfactory results. I have had diphtheria maps made from the records in the Health Office, and they do not seem to show anything with respect to the distribution of the disease in unsanitary districts. One would presume that in the river and creek districts of this city the disease would be more prevalent, but these maps do not demonstrate this, but show the disease to be more prevalent in proportion to the population in the suburbs than in the crowded districts of the city.

The Health Department is now ready to issue, upon the statement of the attending physician that the patient requires antitoxine, and is too poor to purchase it, as much of the remedy as the case requires. This applies to cases

that are being treated by other than district physicians.

As far as statistics as to the utility of the remedy go, the paper is undoubtedly correct. We should endeavor, in this direction, to get accurate statistics of the use of antitoxine in those cases in which the bacteriological examinations have demonstrated the presence of the Klebs-Löffler bacillus. If antitoxine is useful, it is especially, and perhaps wholly, applicable to those cases in which there is the special toxine made by the diphtheria germs. The antitoxine is prepared from these germs, and if it has a field of utility, of which I think there is no doubt, it will be in the cases in which the patient is being poisoned by the toxins of diphtheria.

Again, we must bear in mind that the clinical and bacteriological diagnosis must go hand in hand. The simple fact that the Klebs-Löffler bacillus is not found does not positively prove that it is not present. It may not be caught on the culture-swab. It may not be wiped from this swab on to the serum in the culture-tube. In cases of mixed infection it is well known that the pus-making germs often overgrow the diphtheria germs. I would not wish to be understood as inferring in these remarks that antitoxine should only be used in those cases in which the germ is found, but it should be used in every doubtful case. Experience has shown conclusively that it is not harmful, but in order to reach an accurate conclusion as to its being a real antitoxine, our investigations should consider only those cases in which the specific germ has been demonstrated.

DR. T. LOUIS BROWN: I have had quite a number of cases in the last eight years. My difficulty has been that when I reported them to the Health Department before the officer got there the case was better. I have had many bitter complaints. I may have a peculiar theory. I think that diphtheria is more fatal from the putrescence of the patient's breath than from any other cause. I have always made my diagnosis by the existence of that peculiar color of the fauces, that cadaveric smell, with patches of rapidly growing membrane,

that bleeds very easily if removed, and rapidly forms again. So that it seemed to me that this putrid breath was the principal cause of poisoning the child, and it occurred to me that if we could get rid of this condition and give the child pure air the afflicted one would soon get well. It can be done, for so have I seen it more than fifty times.

I will now give you my plan of treatment. I ask the mother for a tumbler and about two ounces of sugar (I prefer granulated sugar), to which is added about half a drachm of chlorate of potash, very finely powdered. After having thoroughly mixed the potash and sugar, add half a drachm of the fluid extract of hydrastis and about the same quantity of the fluid extract of belladonna. If there is much fever a little aconite, with sufficient essence of peppermint to make the compound pleasant to the taste. If the membrane is abundant, add saccharated pepsin. I use a preparation five times as strong as that of the Pharmacopeia. Give about as much as you can lift on a silver dime, every hour at first, less frequently as the case gets better. In from two to six hours the child's breath is no longer putrid. As rapidly as the child gets pure air recovery takes place. I do not permit the child to have any fluid for at least ten minutes after taking the medicine. Since adopting this plan of treatment I have not lost a case. This is good enough for me. Let those use antitoxine who like it; I never will. I think it will soon be in the same grave with sweet quinine.

DR. P. B. GOODE: My experience coincides with that of the essayist. I have found it to be the exception to have more than one case in the same family. How the disease is propagated I do not know, nor have I heard or read a satisfactory explanation of this fact.

DR. F. P. DORSCHUG: The paper of the evening is a most able one, and I can heartily endorse what the essayist says about antitoxine, which I almost consider a specific. As far as treatment is concerned, we can somewhat rely upon antitoxine, yet I think we should use an antiseptic to prevent the growth of the bacillus while the antitoxine is

acting upon that which is already in the system; for this reason I always use bichloride of mercury.

DR. J. L. CILLEY: I hope the day is not far distant when our expert bacteriologists will be able to tell us why this disease exists and why it attacks certain ones and spares others, which also occurs with other diseases of its class. Years ago I was called to see a little child and found it in the second stage of small-pox. I suggested to its parents to vaccinate the other members of the family, but this was refused. No other case developed in this family. I can recall other similar experiences. As regards sanitation, as has been said, that is of no avail, which is likewise the case in a small-pox epidemic.

DR. SAMUEL NICKLES said that he fully agrees with the previous speakers as to the excellent character of the paper on diphtheria, but he must dissent from them on many points. No disease, in his opinion, presents so many uncertainties in etiology, diagnosis, pathology and treatment as diphtheria.

The diagnosis of diphtheria is extremely difficult. As a rule, the presence of a fibrinous exudate, a false membrane on one or more parts of the fauces, is regarded as a pathognomonic symptom. But, according to Oertel, a very high authority on diphtheria, this disease may exist when the parts of the fauces present only the signs of catarrhal inflammation. But even when the well-marked clinical feature, the false membrane, is present, there is still doubt as to the nature of the affection if the Klebs-Löffler bacillus be regarded as a necessary factor in the causation of the disease. In the majority of cases presenting a fibrinous exudate in the fauces, the bacillus of Löffler is found; but in numerous cases, about one-fourth, it is absent. Bacteriologists call the former *genuine*, the latter *pseudo-diphtheria*. In both forms the clinical and also the anatomical features of the disease are the same. Of 679 cases reported as diphtheria and examined bacteriologically in the cities of Berlin, Paris and New York, only 427 proved to be genuine diphtheria, or about 63 per cent.

The relation that the Klebs-Löffler bacillus bears to the causation of diphtheria is extremely doubtful, not only because it is often absent when the exudate in the throat is well-marked, but also because it is often present in the throat, even in a virulent form, in other diseases, such as scarlatina, measles, whooping-cough, and even in persons in the enjoyment of good health. Johannesssen found the bacillus in one-fourth of the children admitted to the hospital. Baumgarten, of Tuebingen, holds that it has not been proved that the Klebs-Löffler bacillus is the cause of diphtheria, for, though frequently found in true diphtheria, it is not constantly present. Experiments on animals prove nothing, as in them cultures of the bacillus cause a disease in no wise resembling the diphtheria of man. According to numerous authorities, there exists no relation between the presence of the Klebs-Löffler bacillus in the throat and the supervention of the disease, some individuals having been known to harbor the bacillus for months without becoming ill, and others becoming ill at very different intervals of time.

Usually the Löffler bacillus is found accompanied by other micro-organisms, and these probably (Baumgarten) are the cause of the local symptoms of diphtheria. Good observers have stated that several children in the same family having become ill at the same time, one presented diphtheria with Löffler's bacillus and another follicular tonsillitis without the bacillus.

Good observers differ also in regard to the value of antitoxine. Drews, in the article on "Diphtherie-heilserum therapie," in the second volume of the "Encyclopedie der Therapie," says that of 10,345 cases of diphtheria treated with antitoxine, 1,458 cases ended fatally, a mortality of 14.1 per cent. This number, he says, does not differ much from the mortality previously observed, and concludes that the statistical proof for the efficacy of antitoxine is not satisfactory.

It has been found by numerous observers that Löffler's bacillus is often present in the throat for a considerable time after the establishment of con-

valescence. In very careful observations recently made at Berne it was found that in some cases the bacillus was present for several months, and in one case for eighteen months. These observations show that children having had diphtheria should not be admitted to school for at least four weeks after the beginning of convalescence.

DR. E. W. MITCHELL: I wish to say one word as to the statistical proof of the value of antitoxine. This proof is strong enough to convince any candid and unbiased mind. However, it seems to me that the strongest—in a word, the convincing—proof to any one who has had experience in treating cases of diphtheria by the old methods and now by this, is the way in which the cases react to the treatment. As it were, we see the cure. In the old days we fought the disease with swab, with brush, with sprays, with gargles, with mercurials, with iron, with whisky, with this or that, and when the cases got well it was after days of struggle and anxiety, and with patients anemic and exhausted. Now when we see a case early we give a dose of antitoxine in sufficient amount (2,000 to 3,000 units); in a few hours the temperature is down, the appetite returns, and in two or three days the patient is practically well and in far better condition than after the most favorable recovery under any other treatment ever used by any body. We have just been told that the lower mortality is due to the fact that the disease is of milder type. I do not wish at this time to enter upon a discussion of that point. Perhaps it is milder, but the records of the Health Office show that during the past few months it has been virulent enough to kill off a lot of children. I have recently been through an epidemic in my own immediate neighborhood. Many of these cases began with symptoms of as severe a type as I ever saw. Several cases in the same neighborhood, which did not receive antitoxine, or received it late, died. I did not see a case die nor hear of one dying in which antitoxine was used *early*. In most of the cases bacteriological examination confirmed the diagnosis.

Permit me to cite a typical picture: I was called to see a girl of five years who had been feverish the evening previous. During the day on which I was called she had been lying in bed with a high fever, had taken no nourishment, was very drowsy. Upon examination I found temperature 103° , pulse 150; on one tonsil typical diphtheritic membrane the size of a ten-cent piece, the other being completely covered; submaxillary glands much enlarged. At 8 P.M. 2,000 units of antitoxine were given. At 8 the next morning I received word from the mother that the child was well, and it was not necessary for me to call again. Going to the house, I found the child up, dressed and calling for her breakfast. Both tonsils were covered with a thick, dirty white, firmly adherent membrane; temperature was down to nearly normal, pulse 130. The line of demarkation about the membrane was well defined. She remained up and about the house, although the membrane did not completely disappear for two or three days. She showed very little weakness or anemia after the attack, in which respects this is rather an exceptional case, although I have seen several such.

Now I do not believe that my honored teacher, Dr. Nickles, ever saw such a recovery in this kind of a case under any other treatment.

Dr. Twitchell states that the first effect of the antitoxine is to cause separation of the membrane. I have always observed the first effect to be a fall in temperature and pulse and return of appetite. The membrane is frequently not separated completely for several days. I think I have rarely, if ever, observed as long a prodromal period for laryngeal diphtheria as he assigns to it. As I now recall my cases it has seldom been more than one or two days.

DR. C. L. BONIFIELD: I wish to speak about the contagiousness of this disease. As to its treatment I have nothing to say, for I do not treat it.

In 1877, when I was a school-boy in Kansas, a doctor friend to whom I had announced my intention of being a physician showed me a case of diphtheria. Three days later I was confined to my

bed with it. Within a year of that time a married sister of mine died of this disease. Soon after her death I visited my brother-in-law and slept for some weeks in the room in which she died. On my way home, a two days' journey on horseback, I was thoroughly drenched with a cold rain. I arrived with such a development of diphtheritic membrane in my pharynx that the attending physician gave a fatal prognosis.

The following year I came to Zanesville, O. Diphtheria broke out in the school which I was attending, and among the first affected was myself. Again my physician, a man of large experience, gave a fatal prognosis.

Soon after beginning practice I saw a case of diphtheria and had another attack.

About four years ago I attended a case in the Ortiz. My patient got well, and for two weeks I did not show a symptom. Then I went out of town, came home on a cold sleeper and the next day I was sent to the hospital with diphtheria.

Some one may question the diagnosis. To that I can only say: I have never suffered from the disease except when it was prevalent and others were dying with it. I was attended by four different physicians, all men of recognized ability. In several attacks the diagnosis was confirmed by more than one clinician. In my last attack Dr. Roads was my physician.

Several speakers have dwelt upon the fact that frequently only one child in a numerous family will suffer from this disease; others have mentioned that the Klebs-Löffler bacillus may be found in the secretions of the mouth and still diphtheria not be present. To my mind this is not very remarkable. We all breathe the bacillus tuberculosis every day. If the susceptibility to small-pox had been as universal as is the susceptibility to measles it would probably have depopulated the world before vaccination was discovered.

So diphtheria is contagious; the Klebs-Löffler bacillus is its cause, but many people are immune. In two of the attacks spoken of I had doubtless

had the germs in my throat for days or weeks, before I became ill. Until an acute pharyngitis prepared the ground for their growth they were harmless.

DR. L. A. MOLONY: The only criticism I have to offer is the brevity of the doctor's paper, and as the treatment has been considered at some length, I hope he will, in closing, take up the symptomatology.

DR. KRAMER: I desire to ask Dr. Nickles if he has ever used antitoxine.

DR. NICKLES: I have never used it, and so cannot be convinced of its usefulness. The average duration of the illness of my cases with other methods of treatment is three to four days.

DR. J. A. JOHNSTON: If any one desires to test the efficacy of antitoxine he can easily learn its virtue by experimenting on croup cases, taking only the severe ones—those likely to give 90 per cent. mortality if nothing whatever be done. First, take a series of twelve cases and intubate without using antitoxine and you will get a mortality of about 75 per cent.; then take another series of twelve cases, intubate and use antitoxine, and I can assure you that the mortality will not be over 20 per cent. Probably it would be better to alternate these tests from the beginning in order that it may not be said that one series of cases prevailed in an epidemic of mild type and another during an epidemic of severe type. Croup cases being pretty generally caused by diphtheritic bacillus, there is less likelihood of making an error in diagnosis than if the tests were made in cases of tonsillar diphtheria, which can so easily be mistaken for follicular tonsillitis, and *vice versa*.

DR. W. D. HAINES: The paper read by Dr. Twitchell is a very interesting and highly instructive contribution on the subject of diphtheria. It is gratifying to see the sentiments of the paper received so kindly by the members; to me it is a history of practical bed-side experience.

An interesting point emphasized by the essayist is the extreme rarity of epidemics of this disease. I do not recall but one instance where the disease occurred in more than one member of a

family, the exception being a family residing on Cutter Street, this city. All the children, five in number, ranging in age from six months to ten years, succumbed to this disease in one week from the date of the beginning of the first case. This is probably only an apparent exception, seeing that there is considerable doubt as to the duration of the period of incubation in diphtheria.

In reference to sanitary surroundings having little or no influence upon the propagation and spread of this disease, and that it does not select by predilection the "slums" for its victims, do we not find a partial explanation in the essayist's statement that "diphtheria is constantly with us?" Is it not reasonable to suppose that by constant association a certain immunity would be conferred, or, again, that we would have a modification of the original disease—an attenuated bacillus, if you will? This obtains in other diseases, hence by analogy it should, and I believe does, hold good in this instance. Tetanus, despite the statements of some of our bacteriologists to the contrary, is not a common disease among horsemen and herdsmen, probably for the same reasons.

You have no doubt all seen the "comparative statistics" recently published in a British journal anent the treatment of diphtheria by antitoxine and the "old method," which redound greatly to the discredit (?) of the former treatment. Well, one naturally turns to the great Disraeli for relief when they begin quoting "statistics": "Lies—lies and statistics."

As weighing against the use of antitoxine the investigators found albumen in the urine, persisting for many weeks, following cases of recovery after the use of this remedy. Did it ever occur to our British brethren that they might find albumen, post-paralyses and anemia, all persisting for many weeks, in almost all cases where opportunity presents for an examination? It were better had they emulated the practice of one of the speakers present who kept the antitoxine in his coat pocket and condemned its use.

The uncertainty of the period of incubation in diphtheria, together with

the imperative demand for the early use of antitoxine, preclude the possibility of waiting for the bacteriological confirmation of diagnosis. Personally I would as soon wait upon bacteriology for diagnosis in diphtheria as in rattlesnake bite.

DR. TWITCHELL: I have little to add, and I thank the members for the liberal discussion that my paper has elicited. There is but one question that I wish to take up, and that is the action of antitoxine upon the membrane itself. It seems to me that the symptoms of poisoning disappear about the same time that a line of demarkation can be seen around the membrane, which suggests to me that a similar demarkation must be taking place beneath the membrane, and so prevent any new poison entering the body, which is given the chance to get rid of what was there.

We find albumen and paralysis now when we use antitoxine because these were the cases that formerly died.

A Simplification of Widal's Serum Test.

Dr. Fiocca recommends a modification of Widal's serum test for typhoid fever. He takes a drop of a recent culture of Eberth's bacillus and spreads it in a thin layer over a cover-glass. A minute quantity of the blood to be tested is mixed with the layer of culture fluid forthwith. The latter is then placed face downwards on a hollowed-out slide. The quantity of blood is still less than that indicated by Widal as necessary for the success of the reaction, and the red corpuscles are too few to hinder the agglutination of the bacilli. The reaction may be regarded as conclusive if one perceives groups of motionless bacilli with no living mobile organisms in the intervals between the groups. Should any free bacilli be seen, the reaction, though suggestive, is less trustworthy. This method is claimed to give the characteristic reaction in ten minutes, or at most within half an hour. After the latter period the absence of any reaction may be construed adversely to the diagnosis of typhoid fever.—*Med. Press and Circular.*

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317 W. SEVENTH ST., CINCINNATI, O.

CINCINNATI, FEBRUARY 26, 1898.

Editorial.

A TONIC.

The lexicographer, says a tonic is an agent that improves or strengthens the tone of the system.

A highly esteemed member of the medical profession, who has borne the heat and burden of many a long and weary day in ministering to the necessities of the sick and afflicted, who is now laying aside much if not most of the drudgery of his work, writes that in so doing he recognizes the infirmities of age, must needs have an accustomed tonic, and remits his annual subscription for the LANCET-CLINIC. His reasoning powers are yet strong, as shown by his clear good judgment in this instance.

All men are to some extent creatures of habit. Such habits may or may not be needed tonics or agents which improve or strengthen the system, but when a man forms a habit of reading some particular magazine, newspaper or journal, and keeps that habit in active service for a number of years, that particular publication becomes to him a necessity. It feeds his mental organi-

zation in the way in which he is accustomed to take such pabulum. The publication may not be the very best of its class; nevertheless, it affords nourishment in a form that is most easily assimilated and digested by him.

Another gentleman, Dr. Lindley, of Brooklyn, Ind., says this remittance starts him in his forty-first year's subscription for the LANCET-CLINIC. Until within the last year there were several subscribers who had continued this particular tonic for more than fifty years, but the grim harvester with his scythe has come into the fold and gathered them into his bin. The number who have taken the tonic for more than forty years is fairly large, and not likely to diminish. Those of thirty years' standing are yet hale and vigorous, and all the more so for their continued use of the tonic that strengthens. Then the margin comes down to the fourth of a century to those who have continuously taken the tonic during that period, which is closely identified with the writer. Together we have thought and fought the battle of professional life. Our sympathies have been to a great extent identical, each ever ready to stand up for the weal of the other. Often differences of individual opinions have existed, in which there has been an independence without animosity, wherein, in course of time, the invigorating tonic has strengthened the weak and improved the tone of the system of the differers.

For centuries it was empiricism that guided the helm of the medical profession, and to empiricism there is due a debt of gratitude which never can be liquidated. It is to empiricism that the elders in the profession look to-day. Their habits were formed before the era of the new science sent its effulgent and scintillating rays around the scientific

world. The habit was not a bad one, and had many advantages over the newer methods. There was in it a sublimity of faith that was perfectly beautiful when linked by the side of skeptic expectancy, with its hesitating methods. It was the faith of the empiric that made the sages so valiantly stand by the side of the tonic of which mention has been made. They knew that there was in it that which strengthens and tones up the system. They also knew the necessity of continuous treatment. Hence their pertinacity and stick-to-ativeness. They just kept on taking until it meant a figurative life-and-death struggle if an attempt were made to stop.

Thus it was that the dear old man, in quitting his professional labors in waiting upon others, did not stop remittances for his favorite journal, but said: "Send it on; it is a tonic; it strengthens and improves my system." In his declining years he is kept in sympathy and touch with the profession he loves so well. His joints may creak and his step be perceptibly feeble, his eyesight dim and hearing dull, but his accustomed tonic comforts, refreshes and strengthens his mind and very soul. To do without it while life lasts—perish the thought—would be as though a funeral had been held in the house, and he alone the chief mourner.

Our habits are our natures; they become a part of ourselves. An amputation may remove and destroy, but ever after the operation the individual is a defective and not a normal man, just to the extent of the habit or part that has been severed from the body.

Habits are often hereditary. The movements as well as ancestral profile pass from generation to generation. They are identical; like begets like. So it comes about that the tonic of the

father strengthens and nourishes the son. Transmission with remittance is perfectly normal, and takes place without rigor or friction. The habit had no perceptible beginning, the conditions of heredity were lived up to, and a re-establishment never took place. The tonic had its function and performed its work. Like the babbling brook, it goes on and on, gathering additional force and impetus from year to year.

The old doctor was all right and knew his bearings, knew the forces at work within himself when he said: "I take the LANCET-CLINIC as a tonic."

WAR.

The American people have been on edge for the past two weeks, many hoping for a declaration of war, while others deprecated such an act as a calamity so appalling as to cause hesitation in expressing an opinion.

The explosion which wrecked the great battle-ship that was lying in Havana harbor was a catastrophe so serious as to make possible not only a war between the United States and Spain, but in this there may follow a sequence in which other Nations will become involved. The situation is one of extreme tension and gravity in every part of the United States, and ere this can be mailed a state of war may have been declared.

The writer regards war as the normal condition of mankind. Until a century ago wars were fought through hand-to-hand conflicts between armies of men. Improved muskets and field cannon then began to separate combatants and to make appreciable lines of battle, and from decade to decade through the century, in proportion to the improvements made in fire-arms and projectiles, the distance between

battle lines was increased, until at the present time pickets and vanguards would open fire at the distance of a mile from each other, and rifled cannon would be effective at three times that distance.

Even greater changes have been made in naval warfare, both offensive and defensive, so that, like the conditions of scientific medicine, a new science has been born in the developing conditions of war between Nations. The battle between the little Monitor and Merrimac was to the science of war similar in its effect to the discovery of Koch's bacillus. A new knowledge shed its light all over the world, until to-day the great battle-ships are no more like the former frigates than a river skiff is like an ocean liner. And the ordnance, smokeless powder and great disappearing guns, capable of hurling half a ton of solid shot for a distance of ten to twenty or more miles, takes the place of columbiads and smooth-bores, which were often dangerous to friend and foe.

One of the effects of these armored forts, castles and cruisers has been to sharpen diplomatic features, and in this as great battles have been fought as where Nation was pitted against Nation in all the pomp and circumstance of war. It has been brain against brain, instead of brawn against brawn. The victories and defeats have been equally great and decisive.

In case of war, where will be the medical profession? It has not been idle during these recent years. Aseptic and antiseptic surgery has made possible the saving of many a life that went down before the best knowledge of the late War of the Rebellion. Sanitary science has kept pace right along. The taking care of and ministering to men in camp and hospital will be as

unlike former conditions as the changes made in guns, ships and forts.

Of necessity, field hospitals will be pits below the land surface, unless a convenient spot behind a hill is available. Long-range rifles test the ingenuity of men. Ambulance service will be of the most rapid order, and as an arm of the medical department will have a greatly increased importance over its work in the past. Modern methods will enable one man to dress wounds twice as rapidly as in former wars, and he will do his work better. Disease will be reduced to a minimum in comparison with former wars. More than ever the medical corps will constitute a vital part of the strength of ships and armies. In this corps will be found a great conservation of forces, followed by recuperative processes which were formerly regarded as beyond the range of possibility.

The medical profession loathes war, because it is so fraught with every anti-thesis of the teachings of its members. To save life and limb is their work, and not to destroy. Their labor is a mission of mercy to suffering men and women, but when war does come, with all of its cruelty and horrible horrors, the medical profession will be the very first to tender its services, and that with a hearty good will.

THE CINCINNATI HOSPITAL.

The stenosis conditions affecting this institution during the latter months of last year cut down the number of patients below that of the previous year to the extent of several hundred. The showing of lessened numbers for the present year will be even greater. Occasionally a patient goes there that ought not to be admitted, but the number is becoming beautifully small,

CINCINNATI'S CONSUMPTION MORTALITY.¹BY J. M. WITHROW, M. D.,
HEALTH OFFICER.

Wards.	Population by wards.	Deaths from all causes for 1896 and 1897.	Deaths from consumption for 1896 and 1897.	Annual average death-rate from all causes for 1896 and 1897.	Annual average death-rate from consumption for 1896 and 1897.	Percentage of deaths from consumption to total mortality for 1896 and 1897.	Acreage by wards.	Population per acre by wards.
1.....	15,005	369	46	12.29	1.53	12.46	3,910	3.8
2.....	18,930	457	56	12.07	1.48	12.25	500	37.9
3.....	10,475	410	49	19.57	2.33	11.95	96	109.1
4.....	16,530	502	74	15.18	2.20	14.74	273	60.5
5.....	10,950	283	62	12.92	2.83	21.91	112	97.4
6.....	10,440	298	66	14.27	3.16	22.15	89	117.3
7.....	11,140	345	43	15.48	1.91	12.46	56	198.9
8.....	6,545	243	41	38.56	3.13	16.87	172	38.0
9.....	11,250	241	29	10.71	1.29	12.03	109	103.2
10.....	13,065	398	39	15.26	1.49	9.79	84	155.5
11.....	14,475	452	55	15.61	1.89	12.17	141	102.6
12.....	16,045	442	53	13.77	1.65	11.99	740	21.7
13.....	11,360	410	42	18.04	1.84	10.24	70	162.3
14.....	11,320	363	41	16.03	1.81	11.29	114	99.3
15.....	11,980	342	36	14.27	1.50	10.52	68	176.1
16.....	13,145	365	33	13.88	1.25	9.04	78	168.5
17.....	13,585	338	37	12.44	1.36	10.94	105	129.4
18.....	12,160	271	47	11.14	1.93	17.32	87	139.8
19.....	11,455	335	47	14.62	2.05	14.03	26	90.9
20.....	11,585	351	44	15.14	1.89	12.53	136	85.2
21.....	12,770	361	38	14.18	1.48	10.53	421	30.3
22.....	12,835	432	47	16.83	1.83	10.87	353	36.3
23.....	18,265	508	61	13.63	1.67	12.00	204	89.5
24.....	13,930	404	48	14.50	1.71	11.88	790	17.6
25.....	14,880	466	52	15.61	1.74	11.16	1,542	9.0
26.....	16,550	379	36	11.45	1.08	9.24	1,280	12.9
27.....	10,590	282	34	13.31	1.60	12.06	290	36.5
28.....	13,390	368	39	13.73	1.45	10.60	790	16.9
29.....	14,920	411	44	13.77	1.47	10.70	2,416	6.2
30.....	14,630	399	49	13.63	1.67	11.28	4,863	3.0
31.....	10,800	256	23	11.85	1.06	8.98	2,545	4.2
Entire city.....				13.70	1.74			17.9

¹ A report read before the Academy of Medicine of Cincinnati, February 14, 1898.

which is greatly in the interest of the general practitioners of medicine and surgery.

If the medical profession will just hold to the policy of making people understand that the hospital is for paupers only, and that those who are treated in that institution are on the same social plane with those who go to the infirmary, an immense good will be accomplished.

The so-called pay-ward belongs in

the same category. It has in years gone by been used as a screen and convenient resort for the young men about town, who went there to recover from a champaign booze or plain whisky drunk, or possibly from cart-wheel collisions wherein the genital organs alone suffered from bruises and disfigurement. To the aforesaid young men about town the city hospital was reckoned upon as a factor, a sort of haven of resort, where for forty days

and forty nights they could do the penance act while friends and relatives believed they were visiting elsewhere, or if known to be in the hospital were there because of an accident and not from infirmity reasons.

Ventilating processes in, around and all through the hospital are needed a hundred fold more than new wards, which provide for an expenditure of money. New wards are positively not needed at all; the old ones are being emptied—slowly, to be sure—but with a certainty that is unquestionable. The people of Hamilton County are sufficiently burdened with taxation, and do not justify or approve of new wards when there are no patients to put in them.

No new hospital bonds, if you please, Messrs. Members of the Ohio Legislature.

PUBLISHER'S NOTES.

A DOCTOR desiring a good location for practice should address, Box 27, Morning Sun, Preble County, O.

WANT to give away a \$3,000 practice and sell a small property on time to suit purchaser; am moving to city to educate my children. Address, J. B. ALEX, M.D., Mason, Ky.

WE want a lady physician here as soon as possible; a good opening, etc., etc.; a young or unmarried lady preferred. Please put me in communication with such a one if you possibly can. There is none here and a fine opportunity for one. CHAS. RIDGWAY, Druggist, Yellow Springs, Greene County, O.

"LESSONS in Hypnotism and the Use of Suggestion" is the latest publication upon the subject of suggestive treatment, and is a complete manual of self-instruction prepared by Mr. L. J. Meacham, a practical hypnotist and a medical student. Price \$1.25. Will be mailed postpaid upon receipt of \$1.00 and this advertisement. Two hundred pages, thirty-four engravings. THE BISHOP PUB. CO.

419 W. Eighth St., Cincinnati, O.

"The work is concise, practical and in accord with the most recent advances in neurological science." F. W. LANGDON, M.D."

February 8, 1898.

Translations.

PARISIAN MEDICAL CHIT-CHAT.

BY T. C. M.

The Lousy in Art—Distinguished Men Eaten Up by Lice—The Apotheosis of the Louse—God Bless the Duke of Argyle—Considerations on Death—What Fontanelle Said—Menstruation and its Effects at a Distance.

Dr. Henry Meige, whose erudition in all art matters is so well known, has just published in the *Nouvelle Iconographie de la Salpetriere* a very interesting book full of extremely curious works of art, which, with the exception of a copy of a famous painting by Murillo, are but little known to artists. Let us briefly glance over the first part, that is purely historical.

Lice at the present day have lost much of their pathological prestige, and, with them, the lousy have largely disappeared. This, too, is because the old doctrine of Aristotle, that lice enjoyed the blessed privilege of spontaneous genesis in the human body, has been exploded. Yet Theophrastus, Celsus, Galen and Pliny the Elder held that phtheiriasis or the pedicular parasite was not considered as a parasite, but as the cause even of their germination.

At the end of the sixteenth century even, Ambroise Paré united in the same chapter the history of lice, crab lice and flesh worms, speaking as follows:

"These three sorts of animals are engendered from a multitude of humors and corrupt humidities, made by a viscid portion of the sweat, that collects and stops up the pores of the true skin.

"They arise in all portions of the body, principally in the hot and humid places, as in the axillæ, the groins and testicles, to multiply on the skin.

"Small children are very subject to them, as they so often crapulate and engender them by their excrements.

"Lice are engendered in all portions of our bodies, even in the masses of our blood, as Pliny bears witness in several places."

As to lice on the pubis, Ambroise Paré considers them as "arising from a material dryer than the lice, that makes these insects flatten and less well nourished."

This explanation seems very silly to moderns, yet this was the accepted theory up even to the commencement of the present century, and only a hundred years ago a celebrated dermatologist still credited this antique prejudice.

In the days of the louse theory it was their day of splendor. They enjoyed all the privileges now enjoyed by the germs and the germ theory. The old-time louse was a true aristocrat, too; he lodged in the hairy portions of emperors and kings, and cohabited with the beautiful princesses of all the realms. There were even regicide lice, for, without speaking of illustrious personages, such as the dictator Sylla, the philosopher Phesecydes, the poet Alcmæas, the jurist-consultant Mutius, the historian Valerius Maximus, and many others whose names are not recalled at present who succumbed to louse bites, we also have the history of the death of Herod, king of Syria, for the lice were seen coming out of his royal cadaver like a stream of sand; likewise the Emperor Antiochus and the King of Spain, Philip II, who perished victims to these murderous little pests.

In truth, the ancient lice were very formidable. Did they not occasion one of the ten plagues of Egypt?

It is also believed by scriptural commentators that a large measure of Job's suffering was due to body-lice bites. Poor, unfortunate, lousy old Job! But these ancient prophets never saw mercurial ointment ahead.

Without going as far back as the Biblical ages, one can easily prove that lice occupied a distinguished place in the church. It is claimed these vermin carried off, among other high ecclesiastics, the Cardinal Dupont, as well as Fourquare, Bishop of Noyan. This latter prelate was so lousy that he had to be placed in a leather sack before being buried. Even our own age has seen the apotheosis of the louse. In the year 1873 a Papal decree proclaimed the canonization of a miserable creature

who had gained Heaven by clothing himself in rags and suffering the consumption of his flesh by vermin. With Benoit Joseph Labre lice became sanctified.

It appears that the lice of our ancestors enjoyed a vitality and marvellous fecundity. A Portuguese physician of the sixteenth century, one Amatus Lemitanus, wrote an account of a noble gentleman whose body engendered these abominable parasites so rapidly and abundantly that it took two servants to pick the vermin off him and cast them into the sea.

"Scratch, brothers! scratch away!
The lice will bite you all the day."

Ah, the lice enjoyed their age of gold in those days! Mercury came afterwards.

During the American War of the Revolution both British and Continental armies suffered much from vermin, but the Sons and Daughters of the American Revolution need not scratch as their noble sires did, but can enjoy the later blessings of the germ theory and serotherapy. The more we advance in scientific wisdom the more esthetic and cultured we grow. Bobby Burns would have hard work finding a louse climbing a lady's neck at a modern church, unless his spirit returned to his native Scotia, where the good old customs prevail and where it is common to exclaim: "God bless the Duke of Argyle!"

One of our *confrères* lately talked with an old hospital nurse and discussed the subject of death. "The more one sees of death," said the old nurse, "the less one fears it. Those who hear the last remarks of the dying know that, as a rule, they pass away quietly and without pain."

Fontanelle, on dying, was asked what he felt. "Nothing," said he, "except a difficulty in living."

Epicharmes, that ancient philosopher who preferred a drop of wisdom to a ton of gold, remarked: "Of what import is death? Let it wait for us; as long as we exist it is not, and when it is we exist no longer."

To give confidence to cowardly

minds one has but to read the beautiful words pronounced by Victor Hugo over the tomb of the immortal novelist, Frederick Soulie:

"When philosophers and writers, when poets are brought to this common tomb of all men, let them have had a full and inexpressible faith in that other life, without which one is neither worthy of God who gave it, nor of mankind who received it.

"True thinkers never deny a God; they regard with serenity, sometimes even joy, this grave that has no foundation. They know that the lifeless body may rest in the tomb, but that the soul will ever soar on wings.

"Oh! the noble souls of our regretted dead do not fall into snares; no, they are not met in those shadows, that frightful captivity, that horrible chasm we call destruction. They continue to move onwards and upwards, amid most magnificent radiations of glory, in their sublime flight towards an immortal destiny."

* * *

The belief in the chemical action produced by certain women at the moment of menstruation is widespread in almost all countries. It has long been believed that at the moment of menstruation women sour and curdle milk, spoil the oil in salad dressings, etc. These beliefs have been so well established that they have given rise to various industrial practices.

In the great refineries in the north of France all women are formally interdicted from entering such establishments at the moment the sugar is boiling or in the settling-pans cooling for crystallization; aside from such times in the process of sugar refining they are permitted to enter the refineries freely. The excuse given is that when a menstruating woman enters a refinery at certain moments the sugar turns black or dark.

For the same reasons women are not employed in the opium manufactories of Saigon; the Chinese claim that a menstruating woman entering an opium refinery turns the sugar used in its manufacture black.

Dr. L. Laurent goes even further than the manufacturers; he believes in

the existence of mechanical phenomena produced without contact by certain women at the moment of menstruation, and cites numerous examples. Two young women, at the moment of their menstruation, had the phenomenon of adherence of their clothing; it was difficult even to remove the larger garments.

Stockings are often hard to remove from the limbs of menstruating women, and there are numerous cases where it requires strong exertion on the part of a second party to remove them.

As to chemises, the two young ladies mentioned could not wear them, or if they did they could not remove them at the menstrual epoch, so great was the adherence of the textile fabrics to the skin.

The same author notes many cases in which female musicians, when brought in contact with musical instruments, broke the strings or cords, but only at the menstrual period.

A singer in a theatre told him that each time, for several years past, his instrument failed him at the time his wife, also an artist, menstruated, so that at such times he removed his piano from his own home to that of a masculine friend.

Another musician reported that the cords of his violin always snapped and were very fragile when his wife had her periods.

Another example: Two young women, both fine violinists, noted that the violin strings were always very fragile at the times of their menstruation.

Another lady, a veritable violin artist, would never play except for charities, and always refused invitations unless she was perfectly well at such periods, giving as a reason that the cords on her instrument always broke at the time of her menstruation.

A harpist was obliged to renounce her profession because that during her catamenial period several cords in her harp—always the same cords, too—broke when she undertook to play the instrument, that which stopped her a number of times in the midst of concerts.

These are facts that can easily be verified at any conservatory of music.

Besides, it is a well-known fact that female performers on string instruments during their menstrual periods are so irritable and nervous that their play is dryer and more *saccade* than usual, and their instruments are badly handled. These notes need verification, however, to those of us who happen to be sceptical. It is a well-known fact that New England and Southern women, as a rule, will not put up preserves nor jellies at the menstrual periods.

Creasote in Chronic Constipation.

One of the most difficult conditions to treat is that of chronic constipation. The objection to massage of the abdomen and electricity is that they are expensive and require much more time than many patients can give to them. Drugs are usually too powerful, and, once their action is exhausted, are apt to leave the patient more constipated than before. A physician residing in Paris, Dr. Vladimir de Holstein, claims that a satisfactory result may be obtained by administering creasote. This drug should be given pure, and not, as usually is done, in alcoholic solutions or in pills. Seven or eight drops should be given twice daily, after a meal, in a glass of water or any other liquid. If the dose is found not to act, it should be increased. Inasmuch as the patient may complain at first of the burning caused by the creasote, it is often well to begin by a smaller dose—say one drop daily—increasing daily by one drop until the desired result is obtained. Not only is constipation done away with, but the appetite increases and the general condition is improved.

This treatment should be continued for several months. Dr. Vladimir de Holstein thinks that creasote does not act as a purgative, but neutralizes some intestinal toxin which causes paresis of the intestinal tube.—A. T. TURNER, in *Therapeutic Gazette*.

HYPODERMATIC injections of sulphate of atropine in hemoptysis are said to give quicker and better results than any remedy that has ever been given.—*Med. Summary*.

Bibliography.

A SYSTEM OF MEDICINE. By Many Writers.

Edited by THOMAS CLIFFORD ALLBUTT, M.A., M.D. Vol. IV. New York: The Macmillan Co., 1897.

This volume is a continuation of a great work began and noticed in preceding issues of the LANCET-CLINIC. The editor produces in the current volume "General Diseases of Obscure Duration," including acute rheumatism, by Drs. Church and Cheadle; chronic rheumatism, by Dr. A. Garrod; muscular rheumatism and gonorrheal rheumatism, by Drs. K. Spender and Garrod; rheumatoid arthritis in adults and in children, by Dr. Still; rickets, by Dr. Cheadle; osteo-malacia, by Mr. Bowlby; gout, by Sir William Roberts; diabetes mellitus, by Dr. Saundby; diabetes insipidus, by Dr. Ralfe; lardaceous disease, by Dr. H. Dickinson; diseases of alimentation and excretion, such as general pathology of digestion, by Drs. Ralfe and Fenwick; general pathology of secretion, by Dr. R. Bradford; shock and collapse, by Dr. Cobbett; diseases of the mouth, by Dr. W. A. Wills; diseases of the esophagus, dyspepsia, by Dr. Lauder Brunton; dyspepsia in childhood, by Dr. S. Fenwick; gastritis, by Drs. Brunton and Leith; sea-sickness, by Dr. Stocker; neuroses of the stomach and dilatation of the stomach, by Dr. C. Allbutt; ulcer of the stomach and duodenum, by Dr. Dreschfeld; tumors of the stomach, by Dr. Hale White; subphrenic abscess and diaphragmatic hernia, by Dr. Lee Dickinson; abdominal diagnosis from a gynecological standpoint, by Dr. Playfair; enteroptosis and acute peritonitis, by Dr. Treves; chronic peritonitis, tubercle of peritoneum and new growths of peritoneum, by Dr. Allchin; diseases of the bowels, by Dr. L. Brunton; diseases of small intestine, by Dr. H. D. Roleston; colic, by Dr. H. White; diarrhea, by Dr. Brunton; diarrheas of children, by Dr. E. Smith; sprue, by Dr. P. Manson; intestinal obstruction, by Mr. Treves; diseases of the colon, by Dr. H. White; differential

diagnosis of diseases of the anus and rectum, by Dr. Allingham.

As will be observed, the above table of contents takes in a good delegation from the first rank of English practitioners, and each has taken up his stint of work and presented to the profession the latest knowledge upon his particular subject.

The illustrations, which are not numerous, are fairly good, but hardly in keeping with the text, which is of a superior order all the way through, the matter being right up to date.

CONVERSATIONS ON ANIMAL LIFE: For Young Folks (semi-scientific).

By ANDREW JACKSON HOWE, A.M., M.D. Cincinnati: The Robert Clarke Co., 1897.

Not long since attention was directed in this journal to other occupations engaged in by physicians than that of their own professional work, and mention made among others of Dr. A. J. Howe, of this city, as a naturalist. About that time there was in press a little post-humous volume by Dr. Howe with the above title. The book is written in conversational style, and very much reminds the writer of the natural home life of the family, where the children are watchful of and for opportunity to ask their elders "to tell them a story." Nothing so interests the young as to tell them a story. This Dr. Howe does in ways which are not only attractive, but full of instruction. He tells them of birds, insects and animals in a manner and style that is immediately captivating. The book is full of pictures, drawn by the author, and as works of art are excellent, here serving as object-lessons. While the growing child naturally takes to pictures and stories it is rare indeed that there is so happy a combination as may be found in this little book of 363 pages, and yet more rare when the pictures and stories are so artfully arranged as to not only fascinate, but be the means of affording instruction. The children take to them, but in this the conditions are quite similar to those observed when the father, or perhaps grandfather, finds it educational to the

youngsters to take them to the Zoo, the travelling menagerie and circus. The children just have to go, and the make-believe resistance on the part of their seniors is exceedingly superficial. Children like such books, and, to tell the truth, they are equally well liked by the parents. Nearly all physicians are interested in animal life, and it is just the thing for them to do to secure a copy of this book, tell the book-seller it is for the little folks at home, and then go home and read it all through from first to last page, perhaps out loud—to the children, of course.

THE DOCTOR'S WINDOW: Poems by the Doctor, for the Doctor and About the Doctor.

Edited by INA RUSSELLE WARREN. With an introduction by WILLIAM PEPPER, M.D., LL.D. Buffalo, New York: Charles Wells Moulton, 1898.

Now and then there are glints of beauteous sparks which emanate and scintillate to, through and from the doctor's cerebellar gray matter which tell of lives and hearts, nerves, bones and brawn devoted to uplifts of humanity from sickness, pain, misery and yearnings into lives of happiness, bliss and ruggedness of thought and physical being. Ina Russelle Warren has done this in a manner most charming, so that the writer is wont to exclaim: "Here is to you! May you live long, prosper and never observe a shrinkage of your shadow, ever enjoying the happiness you give to others!"

The author has gathered the gems of poesy which pertain to the doctor, carefully placed them in juxtaposition and out of the whole created a book bouquet of hallowed lines, wherein is garlanded the wit and humor, pathos, rhythm and panegyrics, the sublime and emotional tintinabulations of those who hold in their brains, hearts and hands a gift bestowed by Nature's God upon the few.

Would you have something to touch your heart, ever so gently, and have that touch carry you away from or into self? Get this book. It is a rare gem, fit for the choicest setting on the parlor

centre-table, or special library shelf. The work of the publisher is one of art. Get it and see for yourself.

A CLINICAL TEXT-BOOK ON SURGICAL DIAGNOSIS AND TREATMENT: For Practitioners and Students of Surgery and Medicine.

By J. W. MACDONALD, M.D. Philadelphia: W. B. Saunders, 1898. Price \$5.00.

In view of the many works already in the hands of physicians devoted to surgery, the author, in compassion, tells his readers at the outset that this particular volume will be devoted to a solution of two questions, viz., what is the disease or injury? and what is the proper treatment? In this scheme what are known as the principles of surgery, bacteriology and surgical pathology are to a great extent eliminated.

The author gives much attention to methods of examination of patients, which are of special value; then to injuries of the osseous system, including fractures and diseases of bone; injuries of the soft parts, including diseases of joints; injuries and diseases of the digestive system, and of the genito-urinary system; injuries and diseases of the head, and of the spine, nerves and respiratory system; diagnosis and treatment of syphilis; tumors; injuries of the neck, breast and female generative organs, closing with a chapter on the X-rays in surgical diagnosis.

The work is brimful of just the kind of practical information that is useful alike to students and practitioners. The illustrations are very fine. It is a pleasure to commend the book because of its intrinsic value to the medical practitioner.

DISEASES OF THE STOMACH: Their Special Pathology, Diagnosis and Treatment, with Sections on Anatomy, Physiology, Analysis of Stomach-Contents, Dietetics, Surgery of the Stomach, Etc. In three parts.

By JOHN C. HEMMETER, M.D. With many original illustrations, some in colors. Philadelphia: P. Blakiston, Son & Co. For sale by The Robert Clarke Co. Price, \$6.00.

In the development of specialization

processes in medicine, that pertaining to the stomach seems to be the last, and its importance cannot be magnified when it is considered that through this organ passes the nutrition elements for sustaining the body. That its smooth working powers are appreciated by the general practitioner goes without saying, and yet it may be said with candor that the minute processes of the stomach, with its intricate machinery, are not any too well understood.

The attention of research workers has been turned to the stomach, and one of the results is this elegant contribution to the literature of medicine. The author clearly demonstrates the value of a scientific knowledge of the functions of the stomach, including its anatomy, physiology, histology, and their relation to pathological conditions, from which are to be deduced therapeutic resources for the cure of disease. The work itself is of such value that a copy should be in possession of every general practitioner; with it he is able to hold a consultation with an eminent specialist at any time.

NEW YORK STATE COMMISSION IN LUNACY—Eighth Annual Report.

This is an immense work of over 1,300 pages, devoted for the most part to a mass of statistics which would only be of interest to others in the same line of work. There is appended a reprint of the second annual report, which discusses in an entertaining manner the scope of the county and State asylums, the care of the insane, the curability of the latter, their employment and amusements, and other matters of more local interest.

M. A. B.

GREAT care should be taken to have convalescents from measles avoid the rooms or homes of those known to have tuberculosis, as we know that measles in some way predisposes to that disease.

—J. C. WILSON.

ONE-SIXTH grain salicylate of mercury, five times daily, is a satisfactory remedy in syphilis.—*Med. Summary.*

THE
Cincinnati Lancet=Clinic.

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Whole Volume LXXIX.

Original Articles.

**THE INDIAN GIRL'S
SKELETON.**

BY J. C. M'MECHAN, M.D.,
CINCINNATI.

Dr. Carnahan was one of the pioneer settlers of Butler County, Ohio, and for forty years practiced medicine at Dartrtown. A few miles from this village was situated an Indian mound, and early settlers dug many interesting relics from it. The most interesting of all the objects taken from the mound was the skeleton of an Indian girl. It was in a perfect state of preservation, and not a bone of the whole skeleton was missing. The man who dug it up was a farmer, and therefore had no use for a skeleton, and sold it to Dr. Carnahan for quite a good price. The doctor took the skeleton home and employed a man to polish it up and wire it together. When the work was finished the bones were almost as white as ivory, and they were wired together so skillfully the skeleton presented a very perfect appearance. It was then hung in the doctor's office, and every one entering there had a fine view of it. The doctor seemed very fond of the Indian girl, and shook her and rattled her bones, to the great admiration of his patients.

The skeleton seemed to bring him patients and added considerably to his reputation, for people seemed to think that a doctor possessed of such a perfect skeleton must be a good doctor and a skillful physician. He certainly should have become a good anatomist, for all he had to do was to gaze on the Indian girl and at once see all of the

bones of the body and how they were arranged. To tell how many bones there were in the foot or hand it was only necessary to count them. I have seen the numerous skeletons possessed by Hyrtl, the great anatomist of Vienna, and, although they were brought from all parts of the world, yet none of them excelled in beauty the skeleton of this Indian girl.

Dr. Carnahan's office was quite a distance from his house, and his son and I, when we were boys, spent much of our time there. We devoted much attention to the skeleton. The Indian girl was made to stand on her head, to swing, to dance and to go through many manoeuvres that only mischievous boys could think of. All of this, however, only took place during the day, in broad daylight, when the sun was shining and when, if the Indian girl had suddenly come to life and had attacked us, we were in easy call for help. But at night the scene was changed, and the Indian girl was mistress of all she surveyed. Nothing would have induced us to have gone into the office at night, and especially not without a light. When I had occasion to pass the office at night I ran with all my might, and never stopped until I arrived safely at home. Even in my dreams I imagined that the Indian girl was after me, that she pulled me by the leg, flourished her tomahawk over my head or scalped me, and all of this was so real that it was not until fully awake the next morning that I found it but the phantasy of a dream. But, notwithstanding the fear I had of the Indian girl at night, I seldom failed to visit her during the day. The doctor's son and I had a very serious discussion about her one day. The point that we discussed was, how could any one tell

whether she was a boy or a girl? After discussing the question for some time he said: "Look what a big jaw she has; she must be a girl, for *she has more jaw than a boy.*"

When about twenty years old I came to Cincinnati to study medicine. During my medical course, both in the dissecting-room and in the anatomical lecture-room, I saw many human bones and skeletons, but none with the beauty and symmetry of the Indian girl's skeleton. I often thought if I only possessed her skeleton how rapidly I would have learned anatomy. Hardly a day passed but I thought of the Indian girl and her skeleton, and my anatomical studies often brought her vividly to my mind. All fear of the Indian girl had vanished, and when I dreamed of her it was not with tomahawk in hand threatening me with death and scalping, but it seemed she called me back to the old office to talk to her and *to study her bones* instead of those of strangers. I sometimes thought of writing to Dr. Carnahan and asking him if he would sell me his Indian girl, but I knew it was useless, as he almost looked upon her as a member of his own family.

A few years passed away, and after graduating in medicine I began practicing in the same city where I had studied. The first few years that a young doctor devotes to practice he is not usually troubled with many patients, and has time to read up and to study anatomy. Whenever I began to review my anatomy my mind invariably wandered to the little village, the old office and the Indian girl's skeleton. Although I did not see how it would be possible, yet I felt that at some future time that skeleton would be mine. One night I sat up late poring over anatomical books, and, as usual, my mind began to dwell upon the favorite skeleton. A miser longs for money, a boy desires freedom, and I wanted the Indian's skeleton. *Toutes choses venent à lui, qui attend.* The next day an express wagon drove up in front of my office and the expressman brought in a long box. Upon opening it what should it be but the Indian girl's skeleton! Dr. Carnahan had died, and

at the sale of his office and household goods my father had bought the skeleton and sent it to me. It was like renewing an acquaintance with an old friend to see the skeleton once more, and it afforded me much pleasure to have it in my possession at last. It was hung in a cozy corner of my office closet, and was treated with much greater deference than I had treated it as a boy.

A few years later I concluded to take a medical course in Germany, but before my departure I packed the skeleton in a box, locked it carefully in a closet and left the key with a friend whom I could trust implicitly. During a year's absence in Europe I visited many dissecting-rooms and anatomical museums, but saw no skeleton to compare with the Indian girl's. The janitor who had charge of Professor Hyrtl's anatomical museum and dissecting-rooms prepared skeletons at Vienna, Austria, which he sent to various parts of the world. From him I bought a very perfect skeleton, which I used in the pursuit of my studies, but, notwithstanding its ivory whiteness, I preferred the Indian girl's.

Upon returning home one of the first things I thought of looking after was the Indian girl's skeleton. I had made up my mind, on my return, to buy an elegant casket in which to place her skeleton. It was to have been lined inside with purple velvet, and the trimmings on the outside were to have been of silver. But alas! I was doomed to disappointment. The box that had contained the skeleton was still in the closet where I had left it, but the Indian girl had gone never to return again. Some one had stolen the skeleton, and, although years have elapsed since then, no tidings of the skeleton have ever been received. I felt deeply the loss of the Indian girl's skeleton at that time, and even now, should I receive tidings of it, it would be like receiving news of some long-lost friend. It is to be hoped that the present possessor of the skeleton will appreciate its true anatomical worth, and will give it the care that such a rare specimen of anatomical beauty deserves.

WANTED—A NEW NAME FOR A NEW FORM OF INSANITY.

BY FRANK E. FEE, M.D.,
CINCINNATI,
CURATOR TO THE CINCINNATI HOSPITAL.

I want a name that will describe a portion of the human race, principally of the feminine gender, who are so devoid of reason that they can look upon the suffering of humanity without compassion, who can sit beside their fellow beings and see them suffering the tortures of the damned and say with a smile that they should not say that they are sick or have pain, because they are only thinking so. I want a name that will describe idiots who cannot be probated, who walk, talk, eat, sleep, and enjoy the same pleasures that other beings do and yet believe—yes, believe—they do not do so; who believe that the mind controls all natural laws and all movable and immovable things, not necessarily confined to this earth, but to the entire universe; who clothe and protect their nakedness and yet believe that such a thing as the body does not exist; who are following an author who believes that she has been especially ordained to make a new discovery in the scriptures and who believes every mortal man a liar. This form of insanity should demand the attention of the medical profession for the same reason that would an epidemic of cholera or of small-pox. It exists principally among faddists, rainbow-chasers and hypos, individuals who are seeking for something that will revolutionize natural and medical science and set all the world to thinking in the opposite direction. These idiots are known to the world as Christian scientists, faith curists, mentalists, etc., but after searching medical literature in vain I am unable to give a correct scientific name. Scarcely a day passes but that we see in the daily papers an account that So-and-So has died while under the care of these so-called healers, and what explanation do they give? It is always that the patient had not a sufficient amount of faith, or could or would they have become sufficiently "spiritual" they would

never have died, when in the estimation of sane people they only too well know they have become spiritual and it remains for the coronor, the undertaker, and the preacher to do the rest. It will probably be interesting for some to know what these Christian scientists preach. They say they teach by opposites, by the reversal of all known natural laws; they say the heart and blood are nothing but a myth, a delusion and a snare. To quote from their text-book, "the metaphysics of Christian science, like the rules of mathematics, prove the rule by inversion." For example, there is no pain in truth, and no truth in pain; no nerve in mind, and no mind in nerve; no matter in mind, and no mind in matter; no matter in life, and no life in matter. And I suppose it doesn't matter what it is, there isn't anything in it. Again, "the seasons will come and go, with changes of time and tide, cold and heat, latitude and longitude. The agriculturists will find these changes cannot affect his crops, the mariner will have dominion over the atmosphere and the great deep, over the fish of the sea and the fowls of the air. The astronomer will no longer look up to the stars; he will look out from them upon the universe; and the florist will find his flower before he beholds its seed."

Can a sane being imagine an inmate of Longview more insane than a Christian science healer irreverently bending over the head of an unfortunate being who has been mortally wounded by a locomotive, and is just drawing his last breath, while the healer is saying: "Come, get together. You are not hurt. Your right leg does not lie on the other side of the track or your left arm in the engine fire-box. You are only thinking so. You are not bleeding to death. There is no blood; you only think so. Come, live and become 'spiritual.'" But the poor sufferer dies and becomes spiritual.

The question is asked by many, does not Christian science, etc., in many cases do good? Do they not assist in building up diseased minds? The answer is a strong negative. It is a case of an exchange of diseases; they may

recover from an imaginary complaint only to absorb a more serious malady; the secondary disease far exceeds the primary. Again, the question is asked, do they do harm? An affirmative is the answer. They hoodwink the public by citing cases of phantom tumors as large fibroids, of hysterical paralysis and hypochondriasis as true organic disease, and parade these cases before the medically ignorant public as cases they have cured, for the purpose of defrauding the people of their hard-earned money under the pretense that they receive no pay for their services, but that all paid to them they will receive as love tokens, and also to make new converts to the faith. Were it possible for these psycho-pathological degenerates to understand that there exists two great divisions in disease, the organic and the inorganic, and were it possible for them to separate these and treat the inorganic alone, no objection to their faith would be raised. Will they do it? No, for if such were the case they would thereby acknowledge the existence of disease and be compelled to employ physicians to make the differentiation. But what do they do? They continue along the narrow-insane path of believing in the non existence of disease and treat cases of contagious and malignant character by the same method as cases of hysteria or hypochondriasis. They openly violate quarantine regulations; they refuse to relieve pain, no matter how intense; they take toll at the gate of death by obtaining money under false pretenses, destroying the last hope or chance of any poor unfortunate suffering from an organic disease, weak enough to allow them to practice their mercenary and insane methods upon them.

A Pint of Saline Solution Hourly.

It is remarkable how much salt water the colon will absorb, and that quickly, almost greedily. In a primipara in collapse after labor, one pint of a saline solution was injected hourly for twenty-four hours, all being absorbed, and the patient quickly rallied. —S. MARX, New York.

TREATMENT OF URETHRITIS— ACUTE AND CHRONIC.

BY JOHN LEWIN MCLEISH, A.M., M.D.,
CINCINNATI.

Perhaps the most frequent class of cases in the city practice of a young physician are those embracing the various affections of the genito-urinary system. I think hardly enough attention is given in the curricula of our colleges to the scientific treatment of the various forms of urethritis and the many unlooked-for complications and obstacles. The field offers such wide scope for empiricism; the auto-odum of the patient makes him a ready and willing victim in the hands of the so-called "venereal specialist," that many a confiding patient is irreparably wronged. Again, the variety of new prescriptions containing "specific injections" that flood our medical journals is apt to mislead the young physician and develop a chronic trouble, most difficult to contend against. Only last year, the writer having seen in five different journals of excellent repute a highly commended prescription containing methyl salicylate, bismuth subnitrate and liquid vaseline, availed himself of an early opportunity to employ it as an injection. In about five days there appeared a well-developed peri-urethral abscess in the neighborhood of the fossa navicularis, which greatly enhanced the difficulty of the case. This and a few other experiences have developed in the writer a possibly justifiable skepticism on new suggestions in the treatment of gonorrheal urethritis.

Having had exceptionally favorable results, from a basis of treatment, employed successfully in seven cases during the past few months, the writer has felt emboldened to make brief mention in this paper.

H. S., aged twenty, consulted the writer, who found well-developed symptoms of acute gonorrhea, reddened meatus, ardor urinæ, inflamed urethra, mucous discharge, etc. Microscopic examination confirmed the diagnosis.

Treatment was as follows:

R Spts. ætheris nitrosi, }
 Balsami copaibæ, } aa . ʒss
 Spts. lavandulæ co., }
 Liquor potassæ, . ʒij
 Mucil. acaciæ, q. s., ad., . ʒiv
 Of this a tablespoonful ter in diem.

At night I directed the patient to insert a urethral bougie about four inches long, composed of eucaine hydrochlor., gr. $\frac{1}{8}$; sulphate zinc, gr. $\frac{1}{4}$; boric acid, grs. ij; aristol, grs. iij; retaining it in the urethra over night by means of a cotton wad and gonorrhea-bag. During the day, I directed an injection of oxide of zinc ʒij, ad ʒiv aquæ. At the end of the third week the discharge and attendant symptoms ceased, and three days later the patient was discharged.

In all of the other cases nearly as favorable results ensued, and I attribute to the urethral suppository the avoidance of many a *bete noir*, often attendant upon a urethritis. My reasons are that the suppository comes into direct and more lengthy contact with the morbid surface than were the injection the only means of medication. It is simple of employment and acts as a gentle dilator, thus anticipating the more forceful dilatation by the Oberländer method.

I am not advocating any new method of treatment, but rather adhere to the old stand-byes of our fathers; only I have desired to attest to the invaluable merits of the suppository as an adjunct to the injection.

Another injection from which I attained excellent results was the permanganate potassæ, gr. $\frac{1}{8}$; ad. ʒiv aquæ. But this also I supplemented with the use of the urethral bougie or suppository. Of course, when the acute stage has developed into a chronic urethritis I think medication is fruitless, or nearly so, as the only hope of attaining a cure is through careful urethroscopic examinations, followed by dilatations and irrigations, as exhaustively dwelt upon by Dr. Valentine in a recent article.

121 W. Ninth Street.

Prevention of Vesico-Vaginal Fistulæ.

When the child's head in the pelvis ceases to recede after a pain, the forceps should be immediately applied.—THOS. ADDIS EMMETT.

Society Reports.

OBSTETRICAL SOCIETY OF CINCINNATI.

OFFICIAL REPORT.

Meeting of October 14, 1897.

The President, C. L. BONIFIELD, M.D., in the Chair.

E. S. McKEE, M.D., Secretary.

Suppurating Ovarian Tumor.

DR. RUFUS B. HALL reported a case and showed the specimen of a suppurating ovarian tumor with extensive adhesions.

The patient, Mrs. R., wife of a prominent attorney of Baker City, Oregon, is aged thirty-one years, married six years, has no children. She has known of the existence of the tumor for about two years. She was examined by good physicians on the Pacific coast, and a diagnosis of fibroid tumor of the uterus was made and operation advised. Her husband corresponded with me in July, and it was arranged that she should come East in September, which she did.

The clinical history was that of a fibroid tumor. It was apparently solid, was the size of an adult head, was not movable, and was crowded into the pelvis and adherent there. The cervix could be felt high up behind the symphysis. At the examination I was in doubt as to the true character of the growth. The clinical history, the slow growth, and the fact that I could elicit no fluctuation, led me to believe that the growth was probably a fibroid, and I so stated.

The patient entered my private hospital October 3, 1897, and was operated on the 7th, a week ago to-day. Cleansing the vagina under an anesthetic preparatory to doing an abdominal hysterectomy, I had considerable doubt as to the correctness of the diagnosis of fibroid. After I opened the abdomen and the tumor presented, it had the exact appearance of a fibroid of the uterus. There were no adhesions directly in the line of the incision, but there were adhesions low down in front and

behind and in the pelvis. I fastened a strong volsella forcep near the fundus of the tumor with the view of making traction to lift it out. Along the bite of one of the prongs a few drops of suspicious-looking fluid escaped. I at once removed the forcep and tapped the tumor and removed more than half a gallon of fluid, that to the naked eye had the appearance of pus. I then closed the trocar opening with forceps and proceeded to enucleate the tumor. It proved to be an exceedingly tedious and difficult task. In this sulcus on the posterior part of the tumor the colon just above the sigmoid flexure was imbedded for a distance of about five inches, and it was impossible to separate the bowel from the tumor without extensive injury to the bowel. There was a ragged place a half-inch broad and five inches in length where the peritoneum was detached, and several places where the muscular coat of the bowel was torn. Fortunately, no point entered through the mucous coat. This was repaired with fine sutures. The uterus was slightly enlarged, and was firmly adherent to a portion of the cyst wall. You will observe an irregular space of an inch and a half by nearly two inches where the uterine tissue is still attached to the cyst wall. This left that portion of the uterus denuded of its peritoneum. The patient and her husband were exceedingly anxious not to have the uterus removed if it could possibly be saved. As one ovary and tube did not seem to be involved enough to justify their removal, I was also anxious to save the uterus, even though it were injured. By ligating the uterine artery low down on the right side, the side from which the tumor sprang, passing four or five sutures under the bleeding points in the uterus and tying them, I was able to control the hemorrhage. The entire pelvic cavity proper was as raw and ragged as though I had stripped it of its peritoneum. There were numerous points of oozing. For this reason I packed the pelvis with gauze and placed a drainage-tube above the gauze.

There was considerable oozing for twelve hours. I removed four or five ounces during this time. The tube was

removed at the end of twenty-four hours. The gauze was removed on Tuesday morning, October 12. The patient has never had a single bad symptom, nor has her condition been in any way alarming since the operation.

The case is interesting as emphasizing the extreme difficulty of making a positive diagnosis in small abdominal tumors. Even after the abdomen was opened I tried to get fluctuation and could not. To the naked eye it was a fibroid, and I felt certain of it until after I had fixed the volsella to it, tearing it enough to permit leakage of the contents. The clinical history of the two conditions is very similar. The operation was much more difficult than operation for fibroid would have been. It is one of the most difficult operations I have ever made. I could have made a hysterectomy in this case with greater ease to myself and in less time to do the operation I did.

You will notice that more than half of the tumor is ragged and shaggy from the separated adhesions; that portion filled the pelvis.

I wish to again call your attention to the great utility of gauze packing in these cases. It is one of the great advances in pelvic surgery. We utilized the gauze in this instance for two purposes—to check the oozing and to prevent the intestines dropping into the pelvis and forming adhesions there. Intestinal adhesions in the pelvis in many instances mean intestinal obstruction before the patient is convalescent. In my early work in similar cases I am certain the cause of the intestinal obstruction was the adhesion of bowel in the pelvis. It could have been prevented by this method. For this reason, in all these desperate cases I have adopted the plan of walling off the pelvis in this manner.

The patient is thoroughly convalescent, with a normal pulse and temperature, and I think past any danger connected with the operation.

DISCUSSION.

DR. C. D. PALMER: Of course, the interesting point in reference to this case is what the speaker has spoken of

so much—that is, the diagnosis. It was supposed by the physicians who saw this case before she came to Cincinnati that it was a fibroid tumor. Dr. Hall himself inclined to that diagnosis also, yet he was in a state of doubt. Possibly the other gentlemen were in doubt in this matter. An accurate diagnosis prior to abdominal incision was an impossibility. Where a tumor is so packed full of fluid, and so surrounded with adhesions in the pelvic cavity, it is an utter impossibility to say exactly what it is prior to operation. The diagnosis in this case rested, of course, between an ovarian cyst, adherent, full of fluid, semi-solid, and a fibro-cyst of the uterus. It was clearly not a case of interstitial fibroid tumor, because the uterine measurements were only three and a half to four inches. It was certainly an extra-uterine fibroid, and nobody could tell, prior to incision, whether it was a fibro-cyst or an ovarian cyst. So much in reference to the diagnosis.

Dr. Hall speaks of the plan some gynecologists take of treating fibroid tumors with electricity. Of course, this is foreign to the subject, but I will speak of it because he introduced the subject. No intelligent physician or surgeon would to-day think of employing electrolysis in this kind of a fibroid tumor. I am a firm believer in the usefulness of electrolysis in the successful management of certain fibroids of the uterus—a certain kind and of a certain locality—but never for an extra-uterine growth, which has undergone cystic degeneration. It is the indiscriminate use of a valuable remedy which has brought it into unmerited disrepute.

DR. CHAS. L. BONIFIELD: I want to corroborate what the doctor has said about the value of gauze as a means of arresting hemorrhage, and, more particularly, keeping the intestines out of the pelvis, making the abdominal and pelvic cavities two distinct rooms. But my method of employing gauze is different from Dr. Hall's method, and, possibly because it is different, I think it is better. I almost invariably bring the gauze out through the vagina. It takes almost no time to make a hole behind the cervix, and by so doing we

have the advantage of gravity for drainage and we escape the danger of hernia, which the gauze through the abdominal wound causes. It is true, when the drainage-tube is left in only twenty-four or forty-eight hours you can generally get union immediate and firm, but when it is necessary to leave in some foreign body for a number of days, as it was in this case, I think it must inevitably prevent immediate union, and a secondary union is always by the formation of a good deal of scar-tissue, and scar-tissue will stretch and predispose to hernia. It is the rarest of things to have a hernia in the vagina, so for this reason I think it is, in these cases, wise to bring the gauze through the vagina.

DR. EDWIN RICKETTS: In regard to the differentiation between fibroid tumor and a cystic tumor, I think entirely too much stress is laid on that point. If we know that a tumor is there and it ought to be removed, the procedure that is resorted to for one is the procedure resorted to for the other.

An unmarried lady came to me a few weeks ago with a history of uterine hemorrhage. A tumor the size of a cocoanut, extending above the symphysis pubis, as hard as a croquet ball, led me to say to her physician that in all probability we had a fibroid tumor to deal with. On opening the abdomen the tumor first presenting itself had a thick cyst wall, was full of gelatinous substance, and I would defy any man to say whether or not it was a fibroid. In connection with that, this tumor sprang from the left ovary. From the right ovary sprang a tumor, not quite as large as the first; and in connection with the left ovary was a parovarian as large as an orange, and on the other side two parovarian cysts as large as an orange. After turning the uterus up, here was a fibroid on the posterior wall, as large as my thumb and about two inches in length, which accounted for all the bleeding. We hear so much said about the differentiation of these tumors from the outside, and I want to repeat that I think there is too much stress on this. These tumors often go too long because we stop to determine

definitely whether it is a cystic tumor or a fibroid.

DR. HALL: I emphasized the fact that there had been several gentlemen to see this case, who made a diagnosis of fibroid tumor, to bring out that point, the difficulty of exact diagnosis in small pelvic or abdominal tumors. In other words, men who are opening the abdomen every day and every week for years and years are willing to admit before each other that they do not always make a correct diagnosis under these circumstances. Men who are treating these cases by electrolysis—that is, who treat fibroid tumors by electrolysis—who persist in season and out of season in discussing the question and advocating electrolysis wherever they can get a hearing before a medical audience, insist that they always make accurate diagnoses. That, more than anything else, induced me to present this case before this society. I think all of my hearers know who I mean; it is none of our members, I am glad to say, for we do not have any such men in this society; we don't want them.

I am inclined to think that bringing the gauze out through the vagina is a point well taken. I have done this on many occasions, and expect to do it on many more, but in this particular instance I felt that I could do better service to my patient by doing it the other way. There was so much raw tissue that I felt I must pack the pelvis full of gauze. I must make a tumor there one-half or two-thirds the size of the one removed; I must make a tumor which would fill the true pelvis or I would have the intestines adherent in the pelvis. In order to do this I put in the drain. There was one end outside and yard after yard packed in. I may have a hernia; I have had hernias, but this case promises better than most of them. I left a stitch untied to be tied later, and there is not even redness, and it has not moistened the gauze since the packing was removed. But in an ordinary case, if we only want to drain and pack a little portion, there is no doubt of the value of drainage through the vagina.

I do not think it makes much differ-

ence in the final results whether we make a correct diagnosis or not in such cases as this if we ever expect to make an operation. The operation is necessary for the woman's welfare. When she gets to a point where the pressure-symptoms and the other symptoms that usually go with fibroids demand relief, then, if it is a fibroid, it should be removed; if it is a suppurating ovary, it should be removed. But in these cases, if electrolysis is used, it either does no good or greatly complicates the operation when the patient is compelled to submit to one.

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"The work is concise, practical and in accord with the most recent advances in neurological science." F. W. LANGDON, M.D.

February 8, 1898.

MARMOREK'S SERUM.—Antistreptococcic serum, or Marmorek's serum, as the original article is called on account of its discovery and manufacture by Dr. Marmorek, of the *Institut Pasteur*, Paris, seems to be gaining in popularity as it becomes better known. Following the rule laid down by Prof. Roux, the scientific director of the Pasteur Laboratories, this serum is made entirely without antiseptics, thus insuring its freedom from all toxic substances and permitting its use in heroic doses when they are indicated. If we are to believe a large number of favorable reports from all parts of the world, its power to destroy the streptococcus microbe may be fully demonstrated by a faithful trial of the serum. This means much. Streptococcic infection is the most frequent, as well as the most dreaded, of all the complicating influences attending zymotic and infectious diseases; and if a specific for it has been found, as claimed by many, the world owes a debt of deep gratitude to its discoverer. The genuine Marmorek serum, as well as all the antitoxines and other biological products of the Pasteur Laboratories, of Paris, France, including the new "concentrated" antitoxine for diphtheria, are imported exclusively by the Pasteur Vaccine Co., of Chicago, who will be pleased to mail special literature on application. Their offices are located at 56 Fifth Avenue.

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DR. J. C. CULBERTSON,
317 W. SEVENTH ST., CINCINNATI, O.

CINCINNATI, MARCH 5, 1898.

Editorial.

THE CINCINNATI HOSPITAL.

Attention is directed to some recent purposes of the present controlling powers of that institution, viz., a going to the Legislature for power to issue bonds to the amount of one hundred thousand dollars, to be used in the erection of a building for contagious diseases.

To begin, it has been shown that the present management has not been one of even reasonable economy, through an allowing of expensive abuses to grow up and thrive without a word of remonstrance or effort upon the part of the Board of Trustees to make a change for the better. This fact alone should make the Legislature hesitate before granting any such permission as the one solicited.

One hundred thousand dollars to create a couple of wards! Well, now, right off, that is a good round sum to devote to a purpose that is exceedingly questionable as to its value. The largest, best and most expensive public-school building in the city did not cost so

much. A couple of plain but comfortable wards, built of wood, costing perhaps from one to two thousand dollars each, that could be destroyed by fire in four or five years, or at a period when it would be apparent that there was a necessity for such a procedure, would be a hundred-fold better. Tiled floors, walls and ceilings are not a necessity by any means, and should only exist through a bounteous benefaction contributed by individuals and not created by the tax duplicate. The squeezing process entered into by public boards for given, specific purposes rarely have much merit.

The Cincinnati Hospital is more than half-empty, and will remain so for a good long time if the general medical profession keeps tab on the character of patients admitted.

Public and private hospital abuse, in conjunction with that of free clinics and dispensaries, have sapped the very life blood out of the medical profession. An addition to the hospital means a yet further squeeze. Any practitioner ought to attend nearly all of his diphtheria and scarlet-fever cases in their own homes.

A one-hundred-thousand-dollar hospital would mean that there must be patients to occupy its wards in order to indicate a necessity for its existence. Standing idle and vacant would cause some visionary manipulator of affairs to demand or suggest a law requiring that all cases of infectious disease be sent to the special hospital erected for their special benefit. Is it for their benefit? Seldom—very seldom. The patient is wronged and practically made a pauper prisoner. The family disturbed and not allowed to give the care and attention prompted by natural affection. The most sacred feelings of parents and children are to be violated, and all be-

cause the City Hospital must have its expensive wards peopled with patients. Where does the beloved family physician come in? Why, not at all. His business is destroyed.

See how this works right now. When a suspicious case of eruptive disease is reported at the Health Office, who makes the differential diagnosis? A sanitary officer, who is not a physician. Is that creditable, or is it right? It would be with such a man to say whether or not the family physician is qualified beyond him.

These things and conditions are exceedingly trying to the man who endeavors to earn his daily bread by the practice of medicine, and no wonder there is a revolt here and in every other centre of population where such conditions exist, and they are not much worse here than in other localities.

What is wanted in the Republic is a little less government interference where there is no crime or criminal intent on the part of the citizen. Let the police patrol continue to keep its official hands off of people who are sick or injured; that is none of its business.

A new one-hundred-thousand-dollar hospital means a further interference with the practice of medicine. Who is the beneficiary? Yes, who? Why, a few hospital care-takers, coal men and other dealers in hospital supplies, and that is all. Yet, further, such conditions will make physicians vow to not report their patients, and when a death occurs use another name as a given cause. That this is done now is even more than probable, and all because of a little determination on the part of some physicians to not be interfered with by a sanitary policeman as supervisor of their patients. The one-hundred-thousand-dollar hospital would increase

such determinations about one hundred thousand fold.

That hospital is not demanded by the medical profession, or by the people; but what is wanted by physicians is the right to attend to the professional business that naturally belongs to them, and by right-minded people who want to be let alone in their own homes. What general practitioner wants to send his cases of measles, whooping-cough, mumps, itch, typhoid, scarlet fever or diphtheria to a hospital?

SOPHISTRY.

Evidence of the arts and wiles of the deceiver permeates most of the manufacturing interests of our country. Things are not what they seem. The cabinet-maker and carpenter veneer their stock. Supposedly curled-hair stuffings are but cotton and jute. All wool and a full yard in width shrinks and is more or less mixed with shoddy material. Body and tapestry Brussels, believed to be made of long wool, ravel out a mixture of cattle hair. Shoe and other leathers are splits. The best all-rag paper is made of wood. Imported Turkey linen is made in the Miami Valley, and Persian rugs in Lowell. And as to medicines, the sophist is right at home in their manufacture. Infant soothing syrups are narcotized with opium, catarrh snuffs are made potential with cocaine.

The most recent craze has been the adulteration of flour and manufacture of flourine. These deceptions are in keeping and along the same lines with oleomargarine, butterine and cottoline. The "ines" in food products are near of kin to those of pharmaceuticals.

To deceive a purchaser in this way is neither more nor less than obtaining money under false pretenses. Flour has

been comparatively cheap, but under the stimulus of a foreign demand prices have advanced and the sophist has accordingly gotten in his work and is now marketing an adulterated product.

On general principles, just as the legislature enacts laws for a punishment of criminals, specifying offences, so, too, the crime of adulteration should be punished. A good sweeping law making it obligatory upon all manufacturers of every kind of goods to brand or label the exact amount, character and quality of adulterants and substitutes used would be wholesome in its influence. Buckwheat flour partly made of broom-corn seed, and wheat flour mixed with corn-meal should be stamped with formula, and wherever there should be a departure from such formula, goods to be confiscated by the State. Let the adulteration be continued under such restrictions, and the people will not be deceived by the sophists. Every medicine sold or offered for sale, whether Galenical, proprietary or patent, should be marked with the name of all ingredients. And so of every item of food. Deception is never for any good purpose, and represents a disposition to obtain money under false pretenses.

THE EXPECTORATION HABIT.

War has been declared against this filthy practice. Already there have been some bloodless victories. These have been mainly over municipal authorities and railway companies. Yet more, a public sentiment has been aroused that is even stronger than legislative enactments.

To spit or not to spit is decided in favor of the antis by a large majority. Notices are now posted in all Cincinnati street-cars directing attention to the practice, with a request to abstain. The

car floors are in a more cleanly condition, but the greatest improvement is to be found in a development of public sentiment in favor of cleanly habits.

THE OHIO STATE MEDICAL SOCIETY.

The report of last year's transactions has not yet been distributed. During the two or three previous years the volume has appeared with great promptness and in good form. A delay of nine months is inexcusable, and deserving of attention on the part of the society. Complaint has already been made by contributors about the mechanical execution of reprints.

The ensuing meeting is near at hand. Already the programmes of some other State societies have been issued. Such members as expect to read papers should have their subjects well in hand, and notify Dr. Humiston, the President, at once.

Dr. Humiston has been very busily engaged in efforts to effect county society organizations where they do not now exist. In this work he should have the active coöperation of every reputable physician in the State. There are now only one thousand members of the State Society, whereas there are more than five thousand who are eligible. The fact that the one thousand men now members have an influence and professional standing not held by the other four thousand should stimulate the four thousand to take steps to get their names on the enrollment-list.

The United States has more than ten millions of men available for military service, but without organization in army corps, as regularly enlisted men, would be as helpless as children before the battalions of an enemy. Organization for strength is just as

essential in the piping times of peace as in the marching orders of war.

Scientific papers of great value are being prepared for the ensuing meeting. These will call forth discussions worth any man's time to hear.

The Ohio share in the Rush Monument Fund will be up for consideration, besides other matters of interest to all practitioners of medicine.

The meeting at Columbus is of so much importance that there should be present not less than one thousand new members, and then the profession of the State would not be over-represented.

EDITORIAL NOTES.

THE editor of the LANCET-CLINIC is very much interested in animal life, but thinks he will not go into the menagerie business just yet awhile. Any one desiring birds, reptiles, eels and fish should correspond with Mr. John Harper, 3000 Dryades Street, New Orleans, La., as indicated below. John is not charged for this ad. of his business.

NEW ORLEANS, feb 21 1898

Prof J c culbertson—M d Dayton O Allso to your friend J c reeves M d Sir We Kin send you eels for your M d youse If you neade them know is the time to sende them for they will keep live for weekes you can have them At 175 c Apiece for Meadem Size And large Ones At 1 Dolar Apiece you can geat As Small As 1 Dozen Ande half By Payinge your one express on them or We will Sende you 3 Dozen And half And Pay our one express on them And younge Alagataes At 15 Dolars a Dozen And cates At 1 Dolar A piece By taking One Dozen And half One Dozen half And Payinge your One express on them you rite to Prof Orsarn coll Phy & Surg 437 West 59 Street New Yark for fauther information on the ell Subkecte And We Kin Send you live Snakee that is Payson At 10 Dolars A Dozen And eny Kinde of Brdes to Bea Stuff At 3 A Dozen By takinge 3 Dozen And half At one time And todes frogs At a

Dolars And half A Dozen right to John harper 3000 Dryades Street New Orleans L A in the care of g h carpenter Answer So We Kin fill your orders At once And We can Send you read Birdes that Singes At 175 Dolars A hundred And Markinge Birdes At 1 Dolar A piece by taking 3 Dozen Ate one time

REPORT OF THE HEALTH DEPARTMENT OF CINCINNATI.—Following is the statement of infectious and contagious diseases for week ending February 25, 1898:

	Cases.	Deaths.
Measles.....	35	..
Diphtheria.....	14	1
Scarlet Fever.....	8	..
Typhoid Fever.....	6	2
Phthisis Pulmonalis.....	16	19
Membranous Croup.....	2	..
Pertussis.....	20	1
Varicella.....	1	..
Total.....	102	23

The mortality report for the week ending February 25, 1898, is as follows:

Diphtheria	1
Influenza.....	1
Typhoid Fever.....	2
Whooping-Cough.....	1
Other Zymotic Diseases.....	1—6
Cancer.....	3
Phthisis Pulmonalis.....	19
Other Constitutional Diseases....	11—33
Apoplexy.....	2
Bronchitis.....	10
Convulsions.....	5
Gastritis and Gastro-Enteritis.....	3
Heart Disease.....	8
Meningitis.....	2
Nephritis.....	3
Pneumonia.....	19
Other Local Diseases.....	19—71
Deaths from Developmental Diseases..	2
Deaths from Violence.....	5
Deaths from all causes.....	117
Annual rate per 1,000.....	15.02
Deaths under 1 year.....	13
Deaths from 1 to 5 years.....	10—23
Deaths during preceding week.....	86
Deaths corresponding week 1897.....	109
Deaths corresponding week 1896.....	147
Deaths corresponding week 1895.....	167

HEALTH REPORTS.—The following statistics concerning small-pox, yellow fever, cholera and plague, have been received in the office of the Supervising

Surgeon-General of the U. S. Marine Hospital Service during the week ending February 26, 1898:

SMALL-POX—UNITED STATES.

	Cases.	Deaths.
Georgia:		
Griffin, to Feb. 23.....	2	..
Kentucky:		
Butler, Feb. 8-24.....	1	..
Massachusetts:		
Greenfield, Feb. 7-22.....	1	..

SMALL-POX—FOREIGN.

Bohemia:		
Prague, Jan. 30-Feb. 7.....	7	..
Cuba:		
Matanzas, Feb. 2-16.....	..	6
England:		
Liverpool, Feb. 3-10.....	1	..
Gibraltar: January 14-30.....	1	..
India:		
Bombay, Jan. 11-25.....	..	2
Russia:		
Moscow, Jan. 22-29.....	6	1
Odessa, Jan. 30-Feb. 5.....	9	1
St. Petersburg, Jan. 22-29.....	14	4
Spain:		
Corunna, Jan. 30-Feb. 5.....	..	1

CHOLERA—FOREIGN.

India:		
Bombay, Jan. 11-25.....	..	12
Calcutta, Jan. 8-15.....	..	2
Madras, Jan. 5-21.....	..	16

YELLOW FEVER.—FOREIGN.

Brazil:		
Para, Jan. 30-Feb. 12.....	..	12
Cuba:		
Manzanillo, Jan. 17-31.....	..	4

PLAGUE—FOREIGN.

India:		
Bombay, Jan. 11-25 .....	..	1485

DR. J. D. VIOLETTE, of Williams-town, Ky., died February 23, 1898.

The Elimination of Toxines in Eclampsia.

In regard to eclampsia, Barré, of Paris, not only makes transfusion of salt solution, but performs venesection as well at the same time. This is done to lessen the toxines in the blood, in septic conditions, in anemic convulsions, in scarlatina, etc. He holds that in the elimination of poisons from the system by the kidneys, venesection stands second in importance.—*Canadian Practitioner*.

PUBLISHER'S DEPARTMENT.

NOTICE.—Any physician desiring a good location in a country town, where the pay is good, the territory large and thickly settled and where nearly all the roads are graveled; where there is a grain and stock market, railroad, graded school, church and other conveniences, and who wishes to buy good property (conveniently arranged for a physician), also a small drug business, all offered at a reasonable price, will do well to correspond with or call and see the present owner, J. L. KENNARD, M.D., of Yeoman, Carroll County, Indiana. He desires to change climate on account of failing health. There is no competition.

THE Christy Saddle for 1898 is now being displayed by A. G. Spalding & Bros. and their agents throughout the country. If anything it is an improvement on last year's saddle, which was such a phenomenal success. The Christy Saddle has received the universal endorsement of the medical fraternity, and much of its success can be attributed to that endorsement; in fact, the sales of last year reached over 300,000. Mr. A. G. Spalding himself claims that the large sales were primarily due to the fact that the saddle received the endorsement of the medical profession. This year the advance orders for the Christy Saddle are far beyond the expectations of the makers, because the different high-grade manufacturers are offering it now as a regular equipment, or as an option, on their wheels, without additional charge. Close on to one hundred makers have signified their intention of so offering it, simply because it is a high-grade equipment and one that has demonstrated its true worth. Doctors are interested in this saddle question, and they should be, owing to the fact that cycling has become so popular. Physicians should make themselves thoroughly conversant with anything that pertains to the bicycle, and if any doctor who reads this article will send to A. G. Spalding & Bros., New York, Chicago or Philadelphia, for a "Christy Saddle Bulletin," he will find in it some very interesting matter pertaining to the saddle question and the construction of the Christy Saddle.

TREATMENT OF ACUTE URETHRITIS.—

Since the discovery of the specific organism of gonorrhea, the gonococcus of Neisser, the antiseptic treatment of this disease has been established upon a firm scientific foundation. Among the urethral antiseptics the nitrate of silver would rank very high if it were not for its many disadvantages, especially its irritating

effects even in weak solutions, and its property of being readily decomposed and precipitated by the secretions, thus impairing its activity as a germicide. For this reason a number of silver compounds have been introduced in late years, none of which has, however, been completely free from these disadvantages. Lately, Dr. Eichengrün has prepared a silver compound, named Protargol, in which the objectionable features of the other silver preparations have been entirely eliminated. Protargol is a firm combination of silver with a proteid base, and is unaffected by alkalies, sodium chloride, albumen, or other substances which decompose and precipitate other silver compounds. For this reason it is not decomposed by the urethral secretions, and, therefore, exerts a more penetrating action than other urethral antiseptics. While an efficient germicide, it is free, however, from any irritating effect upon the mucous membrane, and is indicated even in the most acute stages of gonorrhea. The experiments made by Professor Neisser and Drs. Goldenberg, Barlow and Benario have shown that it is an ideal remedy in the treatment of cases of acute and chronic gonorrhea of the anterior and posterior urethra, causing a rapid disappearance of the gonococci and a prompt cure. Protargol is employed in 0.25 to 2 per cent. solutions in water, in which it is readily soluble either by the method of injection or irrigation. In preparing these solutions it is advisable to stir the powder into a paste before adding the rest of the solvent.

Over-Feeding of Infants.

The great principle at the bottom of all successful feeding, viz., that an infant is nourished in proportion to his power of digesting the food with which he is supplied, and not in proportion to the quantity of nutritious material he may be induced to swallow, is so obviously true that an apology might almost seem to be required for stating so self-evident a fact; but experience shows that this simple truth is one which, in practice, is constantly lost sight of. That that infant thrives best who is most largely fed, is an article of faith so firmly settled in the minds of most persons, that it is very difficult indeed to persuade them to the contrary. To them, wasting in an infant suggests the need of a large supply of food; in every cry means hunger and must be quieted by additional food.—*Archives of Pediatrics*.

Selections.

FROM CURRENT MEDICAL LITERATURE.

The Transmission and Dissemination of Cancer.

Mr. C. A. Ballance, at the London Medico-Chirurgical Society, said that for a great number of years he had been working at the subject of cancer in conjunction with Mr. Shattock. He stated that he believed that the death rate from cancer was on the increase. There were three main theories as to the origin of malignant tumors, and possibly also of innocent ones: (1) spermatic, (2) embryonic, (3) parasitic. Having briefly discussed the two first problems, he dwelt chiefly upon the third. He alluded to the writings of Sir James Paget, particularly instancing his statement that micro-parasites, or substances produced by them, will some day be found in essential relation with cancers and cancerous diseases. Mr. Ballance emphasized the facts that carcinoma sometimes has a purely local origin, giving as an example epithelioma of the lip, and that metastasis in carcinoma and sarcoma by lymphatics and blood-vessels is such as occurs in tuberculosis. He touched on the question of latency of carcinomatous deposits in lymphatic glands. He discussed auto-inoculation, and the evidence for the transference of cancer from one animal only to another of the same species. Geographical distribution of cancer was dealt with, and particular reference made to noted cancer houses and districts. The phenomena of atavism was noted, as well as some other considerations. Mr. Ballance then proceeded to give a detailed account of the elaborate experiments conducted by Mr. Shattock and himself in order to discover a protozoic parasite. All these experiments have, however, been negative in their results. Infection experiments also met with the same unsuccessful ending. Further, he alluded to the chemistry of carcinomatous growths, especially noticing the facts that in cultures of pathogenic bacteria, albumen

was present, but in malignant growths none was found, and that encapsulated protozoa had cistin or cellulose in their capsules, but neither substance was found in fresh scirrhus tumors. Dr. Brodie had kindly made this research. Mr. Ballance concluded by affirming that the doctrine of the parasitic origin of cancer recommends itself as bringing the essential pathology of malignant growths into natural relation with other diseases, the parasitic pathology of which admits of scientific proof.—*Med. Press and Circular.*

Demonstration of Changes in Nerve Cells after Febrile High Temperatures.

Hr. Goldscheider, at the Society for Innere Medizin, had some time ago shown changes in nerve cells in animals after high temperatures. He had extended his inquiry into the human subject. The first case was one of tetanus with a temperature of 39.9°C . shortly before death. Here in the cells of the spinal cord changes similar to those seen in over-heated rabbits were observed, but not to such a marked degree. A few days ago examination was made in the case of a child who had died of scarlatina with a final temperature of 41° , and here the well-marked changes were seen in the motor cells as in his animal experiments. The changes had, however, produced no change in the function.

Hr. Brasch showed the microscopic preparations along with similar preparations taken from persons dying from non-febrile diseases. The parts were removed about an hour and a half after death, and the changes completely resembled those observed in the rabbits experimented on. The whole cell apart from the nucleus was homogenized, there was no corpuscle of Nissl, the protoplasmic processes had extended and contained no indication of granules.

Whether toxic agents had anything to do with the changes was not certain, but there were reasons for thinking not.

In a case of myelitis and meningitis when the temperature had not reached such a height, similar changes were present, but not to such an extent, and in cases of infective disease that ended

fatally without high fever, the changes were not present.

Hr. Goldscheider said that in over-heated animals that were allowed to recover, the changes disappeared. The changes in tetanus were quite different from those he observed. There the corpuscles were retained, here the cell became homogeneous.—*Berlin Cor. Med. Press and Circular.*

The Doctrine of Averages in Prognosis.

When the medical man peers into the future, in deference to the anxious curiosity of his patient, he runs certain risks. The public are willing enough for him to assume the garb of the prophet, but they are anything but indulgent when the predictions of the medical seer are not fulfilled. Prognosis is not mere guesswork. It is the science of employing the telescope of past experience to obtain a view of things at a distance in point of time. It is not really a forecast of what will happen in the particular case under consideration, but a statement of the usual outcome of a particular concatenation of circumstances and conditions. If one could be absolutely sure of the identity of the individual conditions with those which have previously been observed, then prognosis would be an exact science, but we know, to our cost, that this element of certainty is conspicuous by its absence. The practitioner, therefore, is compelled to guide his reason by the doctrine of averages, the introduction of an "average" providing a working margin for details which are either inaccessible or have been misinterpreted. The very mention of an average implies exceptions, and these exceptions are the opprobrium of prognosis. Practitioners instinctively err on the safe side in this matter and willingly give their prognosis a graver tinge than experience would, strictly speaking, warrant. Having done so the joy of the patient at having escaped disposes him to indulgence, the more so as he is likely to understand that one factor had been omitted from the equation—viz., the skill of his medical attendant, which has upset all previous

calculations. — *Med. Press and Circular*.

A Profitable Wine Trade.

In a recent law-suit which has been brought against an alleged importer of Hungarian wines, on account of a business quarrel, the fact has been brought to light that a supposed high grade of Tokay wine which the "importer" sold for medicinal purposes was manufactured in New York at a trifling expense. The plaintiff in the suit claims that for the past five years he has supplied the defendant with this Tokay, which he manufactured out of alcohol, water, farina water, honey, tokay essence, citric acid, salicylic acid and gelatine. The cost of making six hundred gallons of "Tokay" wine, he states, is about \$75, or at the rate of six cents a bottle. The price of the wine to the public was two dollars a bottle.—*Boston Med. and Surg. Journal*.

Christian Science and the Law.

A Christian Science "doctor" was fined fifty dollars recently in a Kansas City police court for not reporting to the Board of Health a case of diphtheria in a family in which a ten-year-old child afterward died. The woman had administered Christian Science treatment to the child. The case was appealed, but the judgment of the trial tribunal was sustained. In the opinion delivered in the affirmation of the judgment of the lower court, the judge said the methods of Christian Science in attempting to heal were frequently akin to murder.—*N. Y. Medical Record*.

Exalgine.

From a study of the analgesic properties of exalgine made by Dr. Desire, at the Hospital Lariboisière, the conclusion was drawn that, aside from any antithermic action, the product is an admirable specific against pain. It was employed in a great variety of apyretical affections with uniform success. The doses of twenty-five centigrammes, or about four grains, was found sufficient for most cases, but it can be pushed to double or treble this quantity, though as much as a grain is scarcely ever

necessary. If medicine rarely cures, it should at least always console, and sometimes relieve, and with exalgine the author thinks great relief can often be given.—*Indian Lancet*.

The Exercise Treatment of Locomotor Ataxia.

Dana (*The Post Graduate*) says the treatment of locomotor ataxia by means of systematic exercises has been found to produce considerable improvement in the ataxic limbs.

The method was first elaborated by Frankel (*Münch. med. Woch.*, 1890, No. 52), and has been recommended by many continental physicians. Of course, no influence on the cord changes can be expected, but diminution of the ataxia has been recorded.

The following are Dana's directions for carrying out the movements. The exercises are usually taken twice a day; and each exercise is to be done with the utmost care and precision by the patient:

Exercises for the Hands and Arms.

—1. Sit in front of a table, place the hand upon it, then elevate each finger as far as possible. Then, raising the hand slightly, extend and then flex each finger and thumb as far as possible. Do this first with the right and then with the left. Repeat once.

2. With the hand extended on the table, abduct the thumb, and then each finger separately, as far as possible. Repeat three times.

3. Touch with the end of the thumb each finger tip separately and exactly. Then touch the middle of each phalanx of each of the four fingers with the tip of the thumb. Repeat three times.

4. Place the hand in the position of piano playing, and elevate the thumb and fingers in succession, bringing them down again, as in striking the notes of the piano. Do this twenty times with the right hand, and same with the left.

5. Sit at table with a large sheet of paper and pencil, make four dots in the four corners of the paper and one in the centre. Draw lines from corner dots to centre dot with right hand; same with left.

6. Draw another set of lines, parallel

to the first, with the right hand; same with left.

7. Throw ten pennies upon the paper, pick them up and place them in a single pile with the right hand; then with the left. Repeat twice.

8. Spread the pennies about on the table, touch each one slowly and exactly with the forefinger of right hand; then with forefinger of left.

9. Place ordinary solitaire board on the table, with the marbles in the grooves around the holes. Put the marbles in their places with right hand; same with left hand. Patient may, with advantage, practice the game for the purpose of steadying his hands.

10. Take ordinary fox-and-geese board, with holes and pegs, and, beginning at one corner, place the pegs in the holes, one after the other, using first the right hand, then the left.

These exercises should be gone through with twice a day, and should be done slowly and carefully, with a conscious effort every time of trying to do one's best.

Exercises for the Body and Lower Limbs.—1. Sit in a chair, rise slowly to erect position, without help from cane or arms of chair. Sit down slowly in the same way. Repeat once.

2. Stand with cane, feet together, advance left foot and return it; same with right. Repeat three times.

3. Walk ten steps with cane slowly; walk backwards five steps with cane slowly.

4. Stand without cane, feet a little spread, hands on hips. In this position flex the knees, and stoop slowly down as far as possible; rise slowly. Repeat twice.

5. Stand erect, carry left foot behind, and bring it back to its place; the same with the right. Repeat three times.

6. Walk twenty steps, as in exercise No. 3; then walk backwards five steps.

7. Repeat exercise No. 2, without cane.

8. Stand without cane, heels together, hands on hips. Stand in this way until you can count twenty. Increase the duration each day by five, until you can stand in this way while one hundred is being counted.

9. Stand without cane, feet spread apart, raise the arms up from the sides until they meet above the head. Repeat this three times. With the arms raised above the head, carry them forward and downward, bending with the body until the tips of the fingers come as near the floor as they can be safely carried.

10. Stand without cane, feet spread apart, hands on hips; flex the trunk forward, then to the left, then backwards, then to the right, making a circle with the head. Repeat this three times.

11. Do exercise No. 9 with heels together.

12. Do exercises No. 10 with heels together.

13. Walk along a fixed line, such as a seam on carpet, with the cane, placing the feet carefully on the line each time. Walk a distance of, at least, fifteen feet. Repeat this twice.

14. Do the same without cane.

15. Stand erect with cane; describe a circle on the floor with the toe of right foot; same with toe of left. Repeat twice.

Between the fifth and sixth exercises the patient should rest for a few moments.—*Med. Chronicle.*

Influenza in Children.

S. R. Dr. L. Fuerst, Berlin (*Medizinisch-Zeitung*, 1897, No. 78) says:

Since the larger epidemics of 1889-90 and its reappearance during the past few years, the knowledge of the specific germ, the various forms and complications, as well as the estimation of its prognosis, has attained a higher standard. This at first generally believed harmless sickness but later observed dangerous disease, has, in a similar manner, been carefully studied and improved. Experience has taught us that during these epidemics more attention must be paid to the catarrhs of the respiratory tract so often complicating this disease, because we are at first unable to decide whether this complication is due to an infectious catarrh or to the beginning stage of influenza. From many sad experiences during the past six or seven years we deduct that these at first supposed slight catarrhs often develop into severe forms which end

fatally within a few days from failure of immediate rest in bed and proper hygienic and dietetic treatment.

Formerly I used quinine and in the "nervous form" of the disease salophen, and in some cases salicylate of sodium, phenacetin or lactophenin. In children nothing has given me such uniform, reliable and prompt results as salipyrin, whether used in the febrile-prodromal or initial stage of influenza; it being entirely free from any evil after-effects. I can only agree with v. Mosengeil Békars, A. Hennig, Mäller-Breslau and many others, if I attribute an almost specific action to salipyrin in influenza in children. I am sorry to say that I became acquainted and only used the drug since 1890-91. Lütke and Schlovien, however, described the drug in 1889. I will not say how far the individual components, salicylic acid and antipyrin, are accountable for the beneficial action of the drug, or whether it is due to the chemical combination of the two. Still I am of the opinion that it is just the combination which is of prime importance, as was shown at the time by Paul Guttman; similar to the intermittent treatment with quinine. One can almost say that it acts not only antipyretically and sedatively on the nervous system, but also antitoxically. Salipyrin seems not only to weaken the toxic effects of the bacterium Pfeiffer on the organism, but also to increase the resistance of the body against their invasion and also to diminish the streptococcus deposits so that lung and kidney complications become more seldom. The catarrhs remain moderate, but the unpleasant symptoms, fever, headache, general malaise, are checked in their incipency. The progressive tendency of influenza to extend to the bronchi and lungs also disappears.

To obtain good results, it is of prime importance that salipyrin be given at once and in not too small doses. I generally prescribe for:

Small children (up to 5 years)	0.25 <i>pro dosi</i> .
Older children (5 to 10 years)	0.5 <i>pro dosi</i> .
Still older children (10 to 14 years)	1.0 <i>pro dosi</i> .
To be given three times a day in hot tea.	

Generally, after two days, it suffices to use it only twice a day, and with this I continue until three or four days after the beginning of convalescence, the child all the while being kept in bed.

Relapses do not occur, and the concomitant prostration soon disappears. If necessary, alcohol may be used to overcome the prostration.

The question may be raised whether all the cases were specific influenzal catarrh. I answer in the affirmative for the majority of the cases on account of their accompanying symptoms, and, at the time, prevalent epidemic.

It is without doubt that, up to the present time, of all drugs used, with the exception of a few cases in which quinine is more suitable, salipyrin is the safest to prevent the outbreak of influenza where the infectious nature of the catarrh makes one at all suspicious.

Sleep and Sleeplessness.

Dr. Robert A. Fleming recently lectured on sleep to the Edinburg Health Society. He said that an adult should have seven to eight hours' sleep, but the amount depended on the kind of work done during the waking hours. Manual labor meant the necessity for more sleep, and a feeble intellect needed much more sleep than a highly-educated one. A child with its developing brain and mind needed much more sleep than an adult. A newly-born infant should sleep twenty hours at least out of the twenty-four; a child of one to two years, sixteen hours; a child of four, twelve hours; and of ten, ten hours. At the age when the child becomes a man or woman rather more sleep was needed than for an adult. Old people required much less sleep, unless the mind failed, and then they needed a child's allowance. The bed should be fairly hard; a hair mattress was probably best; no feather-bed should even be allowed to exist for a day, unless in an antiquarian museum, and should never be slept on; it is far too airless and hot.

The temperature of bedroom should be 55° to 60°. The hour for retiring to rest was a somewhat difficult and delicate matter to settle. The beauty sleep supposed to be obtainable before mid-

night was a fiction. So long as we got our eight hours of sleep it matters not at what hour we sought our couch, and the misery of rising much before day break on a winter morning was hardly compensated for by the joys of bed much before twelve. In summer early rising was in every sense a pleasure, in winter it was a penance. Possibly the very commonest phenomenon associated with sleeplessness was cold feet. This was readily understood. Cold feet meant blood in excess in brain and internal organs, and, therefore, no sleep was possible till the feet were warm. A hot bottle was in no sense of the word a luxury—in such a case it was a necessity, and one which should always be considered. For the full-blooded, a hot bath or hot foot-bath before bed might procure sleep, for the too bloodless, a stimulant, and for the sleepless brain worker some manual labor in the garden, or plenty of exercise, walking, cycling, etc., so as to tire the muscles, would greatly aid sleep. In those who suffer from insomnia tea and coffee should never be taken at night, as they stimulated the brain; and the utmost pains should be taken to avoid using the brain for the consideration of difficult problems just before going to bed.—*Indian Lancet*.

Hematemesis.

At the last meeting of the Académie de Médecine M. Dieulafoy said he saw a case of a woman who succumbed to repeated attacks of hematemesis, which no medical agents could control. At the autopsy, instead of finding an ulcer, as he supposed, he discovered that the mucous membrane was covered with erosions, especially in the neighborhood of the pylorus. A short time afterwards he met with a similar case. Internal remedies proving fruitless, he performed laparotomy, and when the stomach was opened a small exulceration was found from which blood was oozing. The hemorrhage was arrested by sutures, and the patient made an excellent recovery. Abundant hematemesis was not always the result of simple ulcer of the stomach, as was generally believed. It could be seen in superficial

erosion of the mucous membrane, but generally a small artery twig could be found in the centre of the erosion.

As to the treatment, the speaker said that, if the amount of blood brought up at the time was insignificant, internal treatment might be sufficient, but when the patient lost a pint or more at any one time, surgical intervention became a necessity.

M. Hayem said he was surprised to hear his colleague advocate laparotomy, for he had frequently cured by medical treatment patients suffering from abundant and repeated hematemesis. There existed a variety of gastric ulcer characterized solely by hematemesis, and which got well spontaneously by rest and milk diet. Further, he saw several patients get well by transfusion of blood, or by injections of saline solutions.

At the Société de Chirurgie the same subject was discussed. M. Chaput declared that he performed laparotomy on five patients for ulcer of the stomach, and four of the operations were very successful.—*Paris Cor. Med. Press and Circular*.

Treatment of Cardiac Affections Dependent Upon Arterio- Sclerosis.

In the *Journal des Praticiens* the following treatment for this condition is given:

The diet is carefully regulated and small quantities of meat are administered. In regard to vegetables, potatoes are to be avoided and green vegetables to be employed. In regard to medicinal treatment the following potion may be employed for the purpose of increasing elimination of calcareous material: Bicarbonate of sodium, two and one-half drachms; neutralize this with a sufficient quantity of lactic acid and add lactic acid and simple syrup two and one-half drachms, and distilled water six ounces. Take this quantity during a period of twenty-four hours. It is stated that the lactic acid will augment the elimination of calcareous materials and increase the quantity of the urine, and that under this treatment the patient will be re-

lieved to a great extent of symptoms of cardiac dilatation or asthenia, his dyspnea, cyanosis, edema, and attacks of angina.—*Therapeutic Gazette*.

Diet of Prospective Mothers.

This subject of diet is very often brought to the attention of the physician. Without doubt, some of the discomforts of pregnancy and child-bearing are greatly aggravated by improper diet. The following suggestions found in a French journal may be of use to some one:

An excess of water and albuminous food should be avoided—water, on account of its tendency to produce hydroamnion, and albumen, because it favors excessive growth of the child.

The following is the diet prescribed, which has been tried in a number of cases:

Meat once a day, green vegetables and potatoes, avoid eggs, peas and beans, as they are too rich in albumen. The advantages claimed for this regimen are:

1. The patients are active until the eve of their accouchement; they do not suffer from a sensation of fulness, excessive formation of fat, thirst or constipation.

2. Rapid and easy delivery, even in those cases in which the previous labors have been prolonged and difficult.

3. There is never an excess of liquor amnii.

4. All the women thus dieted have nursed their babies. The quality and quantity of the milk were always good. The children were very small, but healthy and well formed. They averaged about six pounds in weight—*Public Health Journal*.

Sarcoma of the Kidney in Children.

In a very excellent article on this subject in our valuable contemporary, *Medicine*, Dr. D. A. K. Steele, of Chicago, concludes as follows:

From the literature of this subject I think we may fairly deduce the following conclusions:

1. These new growths of the child's kidney are often congenital.

2. They are usually unilateral; when

bilateral it is from secondary infection of the other kidney.

3. They are primary extra-renal, and surround rather than infiltrate the renal tissue.

4. Round-celled is the most common form of these sarcomas.

5. They are of exceedingly rapid growth, and destroy life by exhaustion.

6. They are uniformly fatal when treated medically, the duration of life being from four to twelve months from the time the disease is first observed.

7. Nephrectomy offers the only hope of cure or prolonging life in these unfortunate cases.

8. More accurate early diagnosis and prompt operative interference has lowered and will continue to lower both the primary and secondary mortality.

9. The extra-peritoneal route is preferable when the tumor is small.

10. When large, a trans-peritoneal incision is imperative.

11. It may be either transverse or vertical; considering the nerve supply of the parts, the transverse would seem the better.

12. The operation of nephrectomy in these cases is justifiable, and we are not doing our duty as surgeons to our little patients if we withhold the only chance of life.—*Indian Lancet*.

Uterine Gonorrhea.

Wertheim (*Centralbl. f. Gynak*) believes that next to the urethra the uterus is the most common seat of gonorrhea. The germ sets up true acute interstitial endometritis; in chronic disease the glandular tissue of the endometrium is greatly increased. The muscular coat is often involved, and a kind of sclerosis of the vessels occurs; whilst the connective tissue undergoes hyperplasia at the cost of the muscle cells. Gonococci are usually to be found in the inflamed mucosa, yet sometimes they are entirely absent and they rarely, if ever, can be detected in the exudations in the muscular coat. The os internum offers no protection to the entrance of gonorrheal poison into the uterine cavity. The cervix is less involved and the disease is always least marked nearest the os externum. The puerperium is the most

dangerous condition when gonorrhea exists in the genital tract lower than the uterus. Menstruation, coitus, and the sound are much less liable to expose the uterine cavity to gonorrheal infection.—*Indian Lancet*.

Effects of Grippe on the Female Genital Organs.

Statistics published by Dr. R. Miller (*Centralbl. f. Gynæcologie*), of Munich, include 157 cases of influenza. Of this number 21 were pregnant, of which 17 were confined prematurely. Of the remaining 136, all but 3 suffered from either metrorrhagia, menorrhagia, or other disorders due to an aggravation of pre-existing affections of the genital organs. The author states that in all the parturient women lochia of a bloody character announced the outset of labor. His opinion is that these lochia give evidence of a hemorrhagic metritis, and that the latter is what leads to miscarriage.—*Indian Lancet*.

THE TREATMENT OF ENDOMETRITIS.—

One of the chief aims of treatment in cases of endometritis is to employ measures which will contract the distended vessels in the mucous membrane of the uterus, to re-establish normal circulatory conditions, and thus favor the absorption of exudates in the tissues. These cases often come under the observation of the general practitioner at a time when a cure can be accomplished by efficient topical medication, without the necessity of resorting later to curetting or the application of caustic application to the uterine mucosa. Formerly medicated vaginal tampons were much employed for this purpose, but recently a more convenient, agreeable and serviceable means has been presented to the profession in the form of a wafer. Micajah's Medicated Uterine Wafers combine all the advantages of the medicated tampon with a number of special properties. They are much more readily applied than the tampon, so that part of the treatment can be intrusted to the patient; and their application is therefore to be preferred both on the score of cleanliness and convenience. Aside from these obvious advantages, however, they are composed of ingredients all of which exert an antiseptic, alterative, and healing effect upon the inflamed uterine mucous membrane. Under their continued use the congestion gradually subsides, the engorged vessels assume their normal calibre, the mucous secretions disappear, and exudates are absorbed. But even in cases where the process is so far advanced that operative measures are called for the Medicated Wafers will be found an extremely valuable adjunct in the treatment.

Translations.

PARISIAN MEDICAL CHITCHAT.

BY T. C. M.

Milk Baths—Champagne Baths—The Baths of Modesty—Why Poppæa, the Wife of Nero, Took Baths of Asses' Milk—Why the Mistress of Peter the Cruel of Castile Preferred Wine Baths—A French Ballad of the Milky Way.

Dr. Witkowski has just published a jolly volume, full of illustrations and curious anecdotes of the breast, entitled "Tetoniana." Nursing, low-necked dresses and corsage are all treated of in this truly French monograph. Before going into the subject of breasts fully, Witkowski discourses on milk. We extract a few interesting passages on milk baths, and also champagne baths.

In former days women belonging to the aristocracy had absolute confidence in the efficacy of asses' milk for whitening the skin and making wrinkles disappear, as well as the furrows of pregnancy, that altered the purity of the abdominal skin (*æquor ventris*). Pliny tells us how certain coquettes used lotions of asses' milk as often as seventy times a day, because this number was regarded by Pythagorians as offering great cleanliness. The wealthier classes bathed in this milk, such as Poppæa, Nero's wife after he had discarded Octavia. Poppæa took a milk bath, furnished by five hundred asses, daily. This drove of asses was constantly renewed, so that she could always have fresh milk. Poppæa invented the ointment that bore her name, *i.e.*, "poppæanum." Diana of Poitiers also had the same fancy. In order to dispense with these expensive baths many perfumers have sold various ointments of asses' milk, that are used on the skin before retiring.

"Meantime, hideous to see," says Juvenal, in drawing the portrait of a rich coquette, "her face is ridiculously covered by a sort of paste; it exhales the odor of Poppæa's sticky cosmetic, and glues the lips of her husband. She

bathes in milk, and in order to procure this milk she keeps a drove of asses. She would keep up this fashion even if sent in exile to the Hyperborean pole. This face, upon which is applied so many different drugs, and which receives a thick crust of cooked and liquid starch—should it be called a face or an ulcer?"

Dr. Sue relates, with some reservations, we suppose, that the Marquis de Rochechouart, Governor of Avignon, took a bath of women's milk following a severe attack of illness. Dr. Sue says: "The news being spread through the city that the physicians had decided that a bath of woman's milk alone would save him, the nursing women of the place rushed in crowds to the Governor's palace, and sacrificed, to a certain extent, the lives of their children by giving up their breast milk for the Governor's bath."

The cow milk baths of Marechal Richelieu seem much more veracious. Felix, Count of France, in his "*Souvenirs d'un Page de la cour de Louis XVI.*" gives curious details on this subject. "One will recall," says he, "the famous milk baths taken by Marechal Richelieu, when he was Governor of the province, which for a time disgusted the town with the use of milk, inasmuch as it was rumored around that the Marechal's servants sold the milk after each bath. This was a bad pleasure renewed from the feudal ages. Was not the same thing attributed to Mademoiselle Rohan, Abbess of Marquette, who, it was said, made soup for the nuns of her convent out of the cow milk in which she had previously bathed?"

Despite the small capacity of bathtubs, these daily baths were an expensive luxury. At the present day baths of asses' milk have been abandoned, but in certain localities in Switzerland—at Lindesbruch, for example—they still make use of cows' milk baths as a therapeutic measure. In his "*Voyage en Suisse*" Alexander Dumas tells how he arrived there and desired to take a bath, and, as water was scarce, they offered him a milk bath, that he accepted and found delicious.

By reason of its usual expense, these Swiss milk baths have been called "baths of modesty," because, unlike water, the milk hides the nakedness of the bather.

Those who love the delicate taste and odor of good Swiss cheese should remember they still use milk baths in Switzerland, and one can reap the handsome double profit of the usual Swiss innkeeper by using rennet in the bathtub afterwards for the manufacture of pure Swiss cheese, so infinitely preferred to the imported by American gourmands. French epicures prefer the American-made cheese, as milk baths are not in vogue in the "Land of the Free."

We have heard of some members of the ultra-fashionable world who replace the milk baths of Poppæa with champagne wine, that is afterwards bottled and sold to people in America, North and South.

There are many strange anecdotes bearing on this matter. As early as the fourteenth century, when Maria di Pedilla, the favorite mistress of the King of Castile, Peter the Cruel, took wine baths in the presence of His Majesty and his courtiers; by a supreme effort of courtesy the gentlemen of the Court drank the wine out of Maria's bathtub.

The gentlemen of Henry VIII were also gallant in the same way, for they drank full bumpers from the bathtub in which Anne Boleyn gracefully reclined. One of them, however, refused to do as the others, and when asked his reason replied: "I will keep my wine until the toast comes in;" making allusion to an old English custom of putting sugar in the bumper of wine, which was then passed around in drinking healths, in which a piece of dry toasted bread was dipped.

This is a very interesting book of Witkowski's. But alas! what is very good French appears very bad in English.

Dr. Laurent has written some verses on this book. Here is the suggestive sonnet. French students of the LANCET-CLINIC can make their own English version at leisure.

Sur ces petits fripons de seins,
Qui sont parfois de grands pendards
Un livre plein de beaux dessins
Mele la science aux beaux-arts.

L'anecdote y sourit auprès
De l'hygiène, au front chagrin,
Comme à l'ombre d'un noir cyprès
Pousse l'herbe d'un boulingrin.

A travers les siècles passés,
L'auteur a suivi pas à pas.
Dans les maillots et les corsets,
L'histoire de ces doux apps. . .

De la bible, éclectique, il va
Aux chroniques de l'*Œil de Bœuf*
Et de l'épouse de Siva
Aux merveilleuses de l'An Neuf.

Du sujet épulsant le suc,
L'auteur, a nos yeux consternés,
Dévoile encore, truc à truc,
L'art perfide des. . . faux-nénés.

Donc qu'un succès phénoménal
Accueille, nous le souhaitons,
Ce livre moult original :
Le grand Larousse des tétons!

The Operative Treatment of Pericarditis.

At a recent meeting of the Berlin Medical Society, Dr. Kørte (*Wein. Med. Presse*) reported a case of pericarditis which he had cured by operative measures. The patient, a girl aged seven years, had developed the disease as the result of osteomyelitis of both tibia. Aspiration of the fifth intercostal space furnished thin pus rich in staphylococci. The operator resected a portion of the fifth rib 5 cm. in length, opened the pericardium, evacuated about one litre of a thin purulent fluid. Although the heart was exposed by the incision, no disturbance of its function was observed, even after the pericardial sac had been thoroughly irrigated with a disinfectant fluid. The patient died twelve days after operation of cardiac failure. The autopsy demonstrated a number of pus channels in the left ventricle, some of which communicated with the pericardium, the posterior papillary muscles had been destroyed and the anterior was infiltrated with pus. It is probable that in this case abscesses first formed in the heart muscle, which ruptured into the pericardial sac and produced a pericarditis. —*Indian Lancet*.

Bibliography.

PATHOLOGICAL TECHNIQUE: A Practical Manual for the Pathological Laboratory.

By FRANK BURR MALLORY, M.D., and JAMES HOMER WRIGHT, M.D. Philadelphia: W. B. Saunders, 1897. Price, \$2.50.

The appearance of a book of this character is most opportune, coming as it does at a time when new methods of staining have opened up broad fields in the study of normal and diseased processes in the nervous system. Especially has this been true with regard to the experiments of Golgi, whose staining methods this work clearly describes.

To proceed *seriatim*, a division into three parts has been adopted, the first dealing entirely with post-mortem examinations, the second with bacteriology, and the third with pathological histology.

The first part gives a complete description of the "how to make a post-mortem," and is the most exhaustive section in the book. Special attention has been given to the removal and dissection of the brain and cord. The authors have for the most part followed the teachings of Virchow.

In the second part the usual chapters have been devoted to the descriptions of apparatus and the preparation of culture-media. In the bacteriological diagnosis only the more important bacteria as we find them in the laboratory have been discussed. This, however, has been most thoroughly and systematically done, and the valuable text of this most important chapter is enriched with many illustrations of tube, plate, and microscopic cultures.

The section on histology is by far the most important to the pathologist, its value being increased by the useful chapters preceding it. This part is as complete as is necessary for ordinary every-day work. It is by no means exhaustive; rather the idea has been to treat fully of the well-tried and proven methods and formulæ.

That it is up to date, articles on the

Widal reaction and lumbar puncture will show. The examination of the blood, both quantitatively and qualitatively, has also been given a prominent place.

The book closes with a brief outline of clinical pathology, and recommends the procedures to be adopted in the examination of tumors, cysts of special origin, sputum, gastric contents, urine and feces.

On the whole, we warmly recommend the book as one to be taken into the laboratory as a safe and reliable guide.

M. A. B.

628 Elm Street.

Pulmonary Tuberculosis Treated by Ichthyol.

In *La France Médicale* of November 12, 1897, Branthonne considers the value of ichthyol in old pulmonary tuberculosis and records a number of cases in which he has employed this treatment. His method of administra-

tion is as follows: A mixture of ichthyolate of ammonium two and a half drachms and of 65 per cent. alcohol six drachms is made, and thirty drops of this is given in a glass of water several times a day. The dose is gradually increased two drops a day until 150 drops are taken, when the ascending doses are stopped. In some cases the medicine may be given in pill form, the patient gradually going up to forty-five grains of ichthyol a day. The author of this article believes that the action of ichthyol in this case is similar to that of creosote, and quotes a number of German and French authorities who have resorted to it. The advantages of the treatment are that it does not irritate the stomach to the extent that creosote irritates it, that it diminishes the expectoration, improves the general sensations of the patient, causes an increase in weight, restores menstruation in women suffering from the disease, and altogether favorably modifies the *morale* of the patient.—*Therapeutic Gazette*.

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and a full modicum
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Lime Juice and Pepsin, Valuable Digestive Agent.
Aromatic Fluid Pepsin, Dyspepsia, Indigestion or Any Digestive Disorders.
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Original Articles.

**THE ELECTRIC LIGHT IN
GENITO-URINARY
DISEASES.¹**

BY WALTER B. WEAVER, M.D.,
CINCINNATI.

It is self-evident that to treat disease intelligently we must have a clear idea of the conditions present. In no part of the body is this more essential than in the urinary tract.

We are more fortunate than those who have gone before in that we have the means of ocular examination of these parts. The mucous membrane of the urethra and bladder can be inspected as readily as the external parts of the body.

We are indebted to the genius of Nitze for the present methods of illumination.

THE URETHROSCOPE.

The urethroscope helps to clear up many obscure urethral troubles. The source of many exasperating cases of gleet is often made plain by visual examination. The discharge may be due to any one of a number of lesions, the kind and location of which can be only surmised without a urethroscopy. A commencing stricture, a patch of granulations, a discharging gland, an ulceration, a foreign body, a papilloma or a polypus may be revealed by means of the endoscope.

The diagnosis made, the appropriate treatment is naturally indicated. A beginning stricture can be obliterated by the use of proper dilators. Granu-

lations are to be touched with nitrate of silver, likewise an ulcer. A discharging gland should be evacuated and either injected with a strong solution of silver nitrate or destroyed by electrolysis. A foreign body or growth may be easily removed with the proper instruments.

Even an acute discharge may puzzle the attendant. A microscopical examination may show no gonococci, and yet we are at a loss to account for the trouble. It is unnecessary to say that no one would think of attempting an examination of this kind in acute gonorrhea. Given a case, however, in which no gonococci are found, we may be able to locate the disease by inspection of the urethral canal. Cases are on record in which the presence of a secondary syphilitic roseola, a chancroid or a chancre was the cause of the discharge. I saw a case of this kind this morning. The patient was suffering from an acute urethral discharge. No gonococci were found upon microscopical examination. Upon inspection of the urethral canal with the urethroscope I found an ulcer which looked like a chancroid three centimetres from the meatus. This ulcer may be specific.¹

As to the best urethroscope, there is a great difference of opinion. There are a number from which to make a selection—Fenwick's aero-urethroscope, the Leiter instrument as modified by Otis, Casper's endoscope, and the Nitze-Oberländer urethroscope (Figs. 1 and 2). These, except the last named, have the light at the distal end. They are on the principle of the head mirror and plain tube. Rays of light reflected through a tube lose more or less illuminating

¹ Read before the Academy of Medicine of Cincinnati, January 24, 1898.

¹ February 11. The patient has developed a well-marked syphilitic roseola.

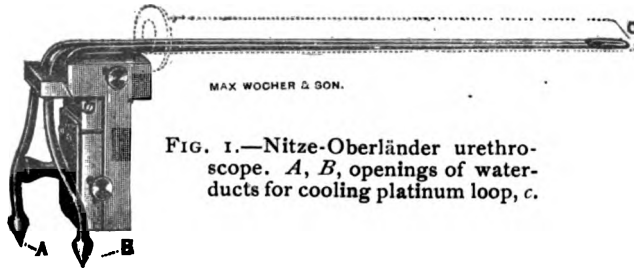


FIG. 1.—Nitze-Oberländer urethroscope. *A, B*, openings of water-cooling apparatus for cooling platinum loop, *C*.

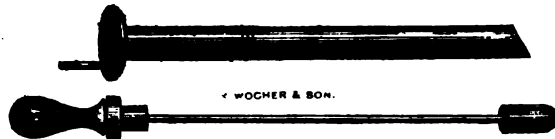


FIG. 2.—Endoscope tube and obturator for same.

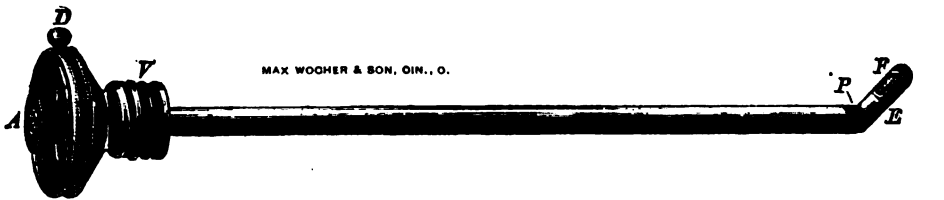


FIG. 3.—Plain cystoscope. *A*, ocular; *D*, knob to show position of beak; *V*, shoulder for attachment of current-carrier; *P*, prism; *F*, electric lamp; *E*, beak.

power unless improved by means of lenses, and this detracts from the utility of a urethroscope. The aero-urethroscope is faulty in that the mucous membrane, when put upon the stretch by the inflation of air, does not give a true picture. As Fenwick points out that on account of the incomplete or complete rings and interlacing of fibrous tissue just beneath the epithelial layer, the image may be that of commencing stricture when the canal is distended by air. Then, too, the stretched mucous membrane is pale and does not show patches of congestion or granulations.

I think the Nitze-Oberländer instrument comes nearest filling the requirements. In this instrument we have the means of illumination at the proximal end of the tube, consequently we get a true picture. It has been called a troublesome, cumbersome instrument. The following objections have been raised: The water-cooling apparatus occupies too much of the tube; the platinum loop burns out very frequently; there is danger of pushing off the loop

when making applications with a cotton swab. I must admit that it requires greater care than other instruments of its kind, but the satisfaction from its use compensates for the trouble. The water-cooling apparatus does not take up a sufficient portion of the calibre of the tube to materially interfere with vision. By proper attention the platinum loop will last as long as a small incandescent lamp. As to the difficulty of passing the cotton-wrapped probe down the tube, that can be remedied by removing the lighting apparatus when making an application in this way. It gives me pleasure to show you this instrument. It has given a great deal of satisfaction both to myself and to my patients.

It is useless to take up time to go into detail in the recitation of cases, but one case in particular which is of interest I shall report. It is that of a patient who had suffered for eighteen months from a slight gleet. Upon endoscopy a distended, discharging gland five centimetres from the meatus could



FIG. 4.—Nitze irrigation-cystoscope. *A*, ocular; *B*, inlet; *C*, outlet of irrigation-tube.

be distinctly seen. This seemed to be the seat of the trouble, as all symptoms disappeared after evacuating the gland and injecting into it a solution of nitrate of silver.

THE CYSTOSCOPE.

What has been said of the urethroscope is doubly so when speaking of the cystoscope. At the present day no one presumes to make a diagnosis of obscure renal or vesical disease without the aid of the cystoscope.

Nine years ago Willy Meyer made the following statements: "No surgeon doubts that cystoscopy has a great future. To be successful requires a close study and a great deal of personal experience."

At that time cystoscopy was in its infancy, and has made wonderful progress since. To-day the cystoscope is not only a valuable aid to diagnosis, but is indispensable in the treatment of certain lesions of the bladder wall.

Cystoscopy is not, as some think, a dangerous procedure. It is not more harmful than is other instrumentation of these parts. Of course, there are some contra-indications. Fenwick mentions the following:

1. Obvious tuberculosis of the urinary tract.
2. Traumatic renal hematuria of recent origin.
3. Irregularly enlarged prostate.
4. Residual urine due to ataxia.
5. Phosphaturia.

Most physicians do not appreciate the value of the cystoscope. You will hear it said that you can see anything you desire with the cystoscope. It is an instrument like the microscope. One must be accustomed to its use and the

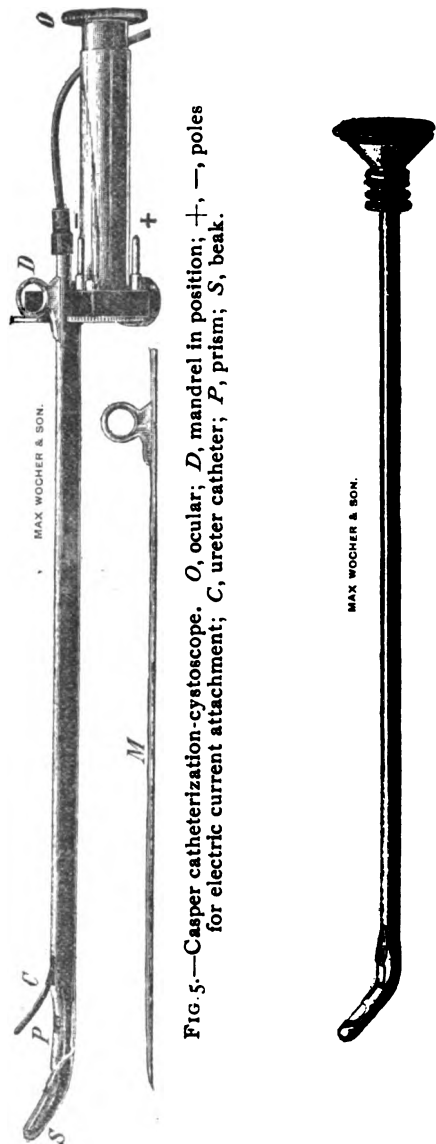


FIG. 5.—Casper catheterization-cystoscope. *O*, ocular; *D*, mandrel in position; *+*, —, poles for electric current attachment; *C*, ureter catheter; *P*, prism; *S*, beak.

FIG. 6.—Plain cystoscope of Albarran.

eye be able to interpret that which is seen.

The first essential is to become familiar with the appearance of the normal mucous membrane. The normal image has been likened "to that of the retina when viewed through the ophthalmoscope, and the trigone reminding

is cystoscopy useful? Hematuria no doubt stands preëminent. Many cases will give us no symptoms upon which to rely; really it is doubtful if any symptom of this affection is reliable. A careful cystoscopy will at once reveal the source of hemorrhage. If renal, the urine will be seen to be tinged with

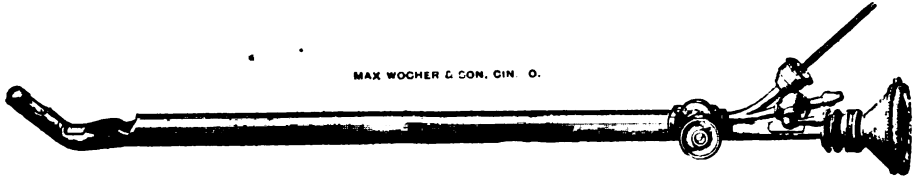


FIG. 7.—Same as Fig. 6, with catheterization attachment in position.

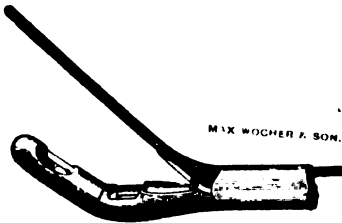


FIG. 8.—Tip of instrument (Fig. 7), with catheter in position to be inserted into the ureteral opening.

blood as it escapes from the ureter. If the blood is of vesical origin we will find it due to an aggravated cystitis, a growth, a calculus (free or encysted), an enlarged prostate, or an ulceration.

A case I saw in Nitze's clinic last summer will illustrate the fallacy of depending upon symptoms in making a diagnosis in hematuria. From the symptoms a guarded diagnosis of vesical growth was made. Upon cysto-

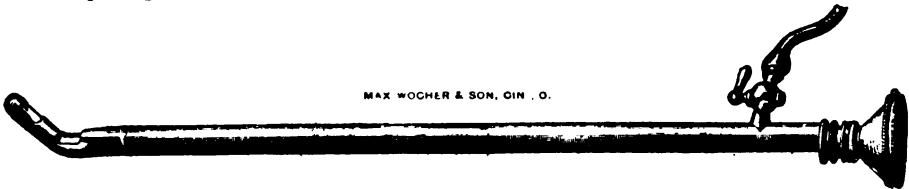


FIG. 9.—Same as Fig. 6, with irrigation attachment in position.

one of a sandy shore, so even and yellow is its surface."

After introducing the instrument we look first for the trigone and ureteral openings at the extreme angles. By careful observation the ureteral openings will be seen to gape now and then and the efflux of urine take place. The appearance of the escaping urine reminds one of air bubbles thrown out by fish into the water of an aquarium. Once seen this picture is never forgotten. "The trigone with the ureteral openings is to cystoscopy what the optic disc is to ophthalmoscopy." Taking the trigone as a starting-point, we can examine the rest of the bladder walls.

The question arises, in what diseases

scopy the bladder was found to be absolutely free from any abnormality, but with each contraction of the left ureter a stream of blood was projected into the bladder.

We are able not only to detect renal hematuria, but we can, by carefully watching the jets of urine from the ureters, estimate the activity of the separate kidneys. From the use of the catheterization-cystoscope we have learned that one kidney may secrete urine containing uric acid or albumen and the other remain normal. In the same manner we can determine whether or not we have to deal with renal pyuria.

Cystoscopy is a safe, sure method of examining for stone. The introduction

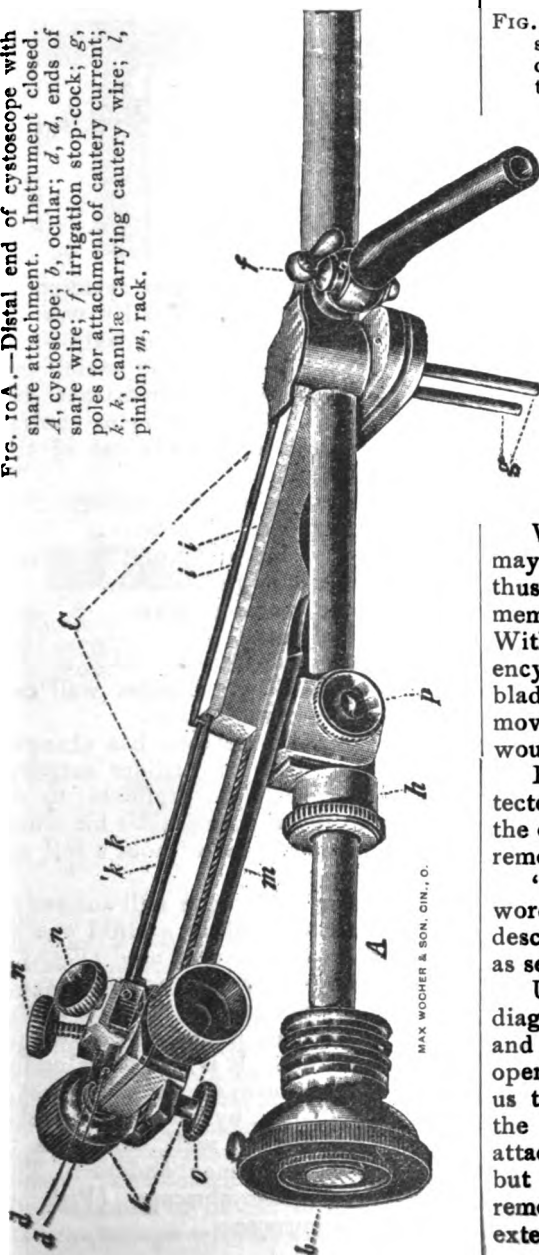
of the cystoscope is not more painful, and in the same hands will not bruise the mucous membrane more, nor, I believe, as much as the sound. A calculus behind the prostate or the intra-ureteral fold is often missed by the sound. A case which I saw in consultation with Dr. Whittaker plainly demonstrates the utility of the cysto-

scope in this connection. The patient, a man, sixty-six years of age, had been



FIG. 10B.—Proximal end of Fig. 10A. Cystoscope and long-beaked snare. *a*, beak of cystoscope; *c*, beak bearing snare; *e*, aperture of irrigation-tube.

FIG. 10A.—Distal end of cystoscope with snare attachment. Instrument closed. *A*, cystoscope; *b*, ocular; *d*, *d'*, ends of snare wire; *f*, irrigation stop-cock; *g*, poles for attachment of cautery current; *k*, *k'*, canulae carrying cautery wire; *l*, pinion; *m*, rack.



seen, according to his own statement, by two physicians, who had sounded him for stone and none was found. The first glimpse through the cystoscope showed the presence of a calculus.

Within the last year, in one of the hospitals of this city, there were two cases in which vesical calculi were suspected but could not be found with the sound. Post-mortem examination revealed nine stones in one bladder and one in the other. What could have been done with the cystoscope?

With the operative cystoscope we may deal with the last fragment and thus prevent the bruising of the mucous membrane by using the large lithotrite. With this instrument we may lift an encysted stone from its pouch into the bladder proper and thus be able to remove by litholapaxy a stone which would otherwise require a cystotomy.

Foreign bodies are also readily detected with the cystoscope, and with the operative cystoscope we are able to remove them with precision.

"*Entzückend schön!*" No other words could be more expressive in describing the picture of vesical growths as seen through the cystoscope.

Until the advent of the cystoscope a diagnosis of vesical growth was difficult and often impossible without a cutting operation. Cystoscopy not only affords us the means of definitely determining the presence of a tumor, its position, attachments and probable character, but in many instances allows us to remove the same without making an external wound.

Large tumors are to be snared off piecemeal at different sittings; smaller growths may be removed at one sitting with the snare or cautery. In some cases it is not necessary to take a man from his business.

Nitze reports thirty cases of vesical tumors upon which he has operated

FIG. 11A.—Same as Fig. 10A, when cystoscope is extended in the bladder.

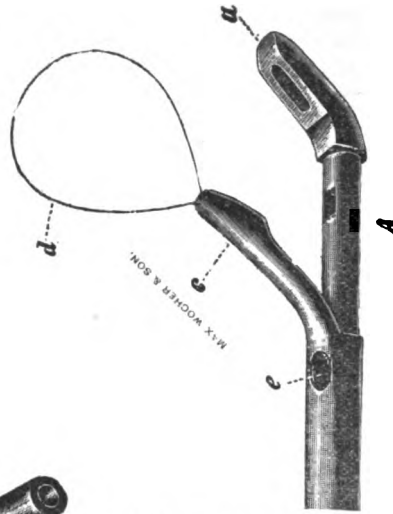
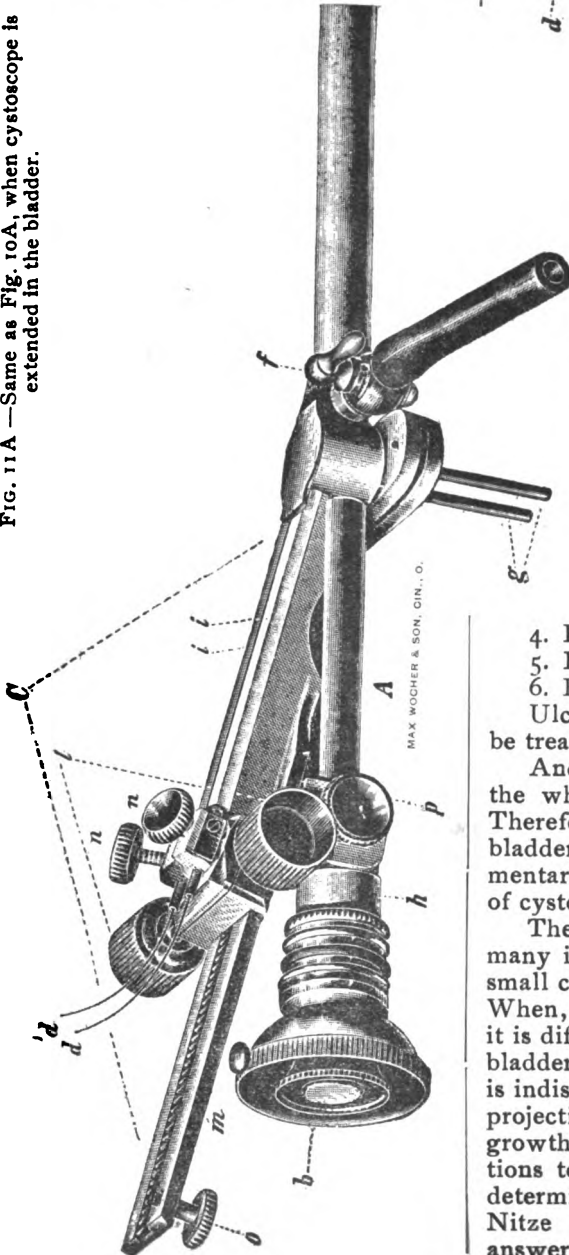


Fig. 11B.—Same as Fig. 10B, cystoscope extended and snare projecting.

with the operative cystoscope. The rate of mortality was $3\frac{1}{2}$ per cent.—*i.e.*, one death—and this was a case in which the growth was carcinomatous. He gives the following as contra-indications for the use of the instrument:

1. Severe hemorrhage.
2. Bladder catarrh.
3. Irritation of the kidney or kidney pelvis.
4. Presence of high fever.
5. Epididymitis.
6. Prostatitis.

Ulceration of the bladder wall can be treated by cauterization.

And so the cystoscope has changed the whole aspect of bladder surgery. Therefore, one who professes to do bladder work cannot consider his armamentarium complete without a full set of cystoscopes.

The plain cystoscope will answer in many instances, and in a child one of small calibre only can be used (Fig. 3). When, from hemorrhage or other cause, it is difficult to keep the medium in the bladder clear, an irrigation-cystoscope is indispensable. It is also of value for projecting a stream of water against a growth, and thus, by changing its relations to the bladder wall, allows us to determine its attachment and form. The Nitze irrigation-cystoscope (Fig. 4) answers all purposes.

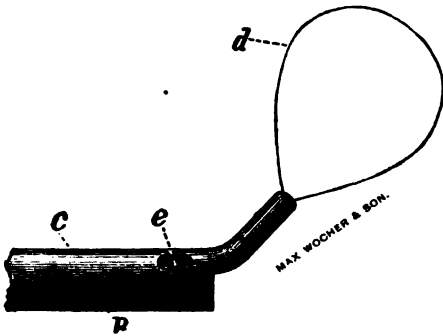


FIG. 12.—Medium length beak with snare projecting.

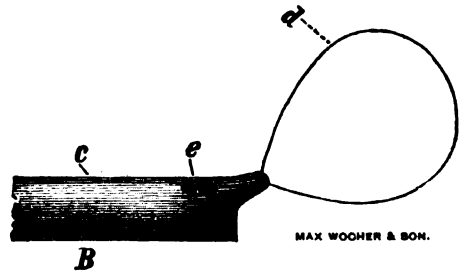


FIG. 13.—Short-beaked snare.

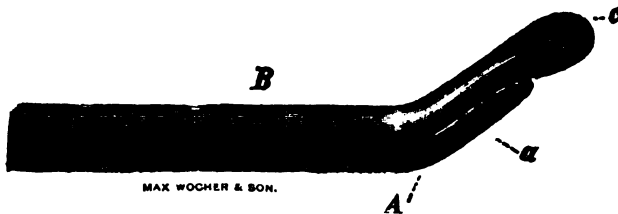


FIG. 14.—Long-beaked cautery. Cautery and cystoscope in apposition for insertion. *A*, cystoscope; *a*, beak of same; *B*, cautery-tube; *c*, cautery.

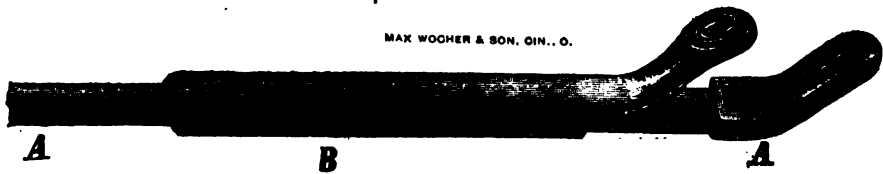


Fig. 15.—Cautery on beak of medium length. Instrument open. *A*, *A*, cystoscope; *B*, cautery bearing tube.



FIG. 16.—Short-beaked cautery for neck of bladder. Instrument open.

Too much cannot be said of the catheterization-cystoscope. With it the ureters can be catheterized with more comfort to the patient and more satisfaction to the physician than by any other method. I have thus far catheterized forty ureters, in most cases without the use of cocaine. Casper's instrument (Fig. 5) answers better than any other. The detachable mandrel allows the catheter to be left in position and the cystoscope withdrawn.

There is a new instrument (Figs. 6, 7, 8, 9), invented by Albarran, which, with its attachments, can be used as a plain cystoscope or for either irrigation or catheterization. The catheter-carrier is so arranged that by turning a screw at the ocular end a beak near the lens guides the catheter toward the ureteral opening. This, of course, is an advantage, but I do not think the instrument will come into general favor, as the cystoscope cannot be taken out, leaving

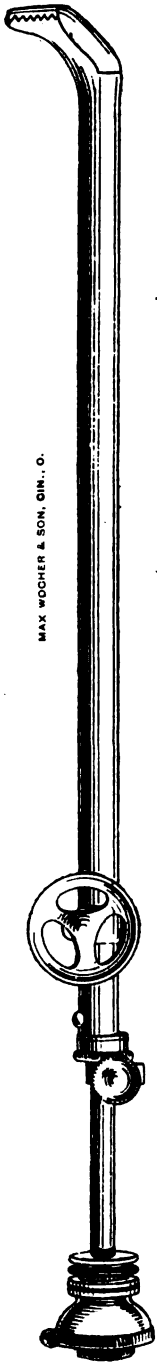


FIG. 17.—Lithotrite closed, with cystoscope in apposition ready for introduction.

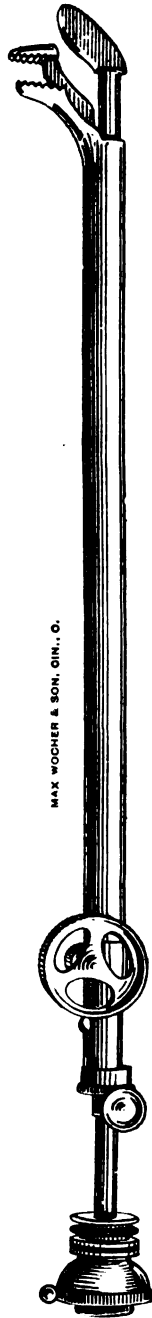


FIG. 18.—Lithotrite partially open, with cystoscope projecting.

the catheter in the ureter, as can be done with the Casper instrument.

The Nitze operative cystoscope (Figs. 10 to 18) represents the greatest achievement of this man's wonderful genius. This instrument consists of three snares, three cauteries, and two small lithotrites. The snare and cautery attachments have beaks of different lengths for reaching different portions of the bladder. The lithotrites vary in size only.

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[FOR DISCUSSION SEE P. 263.]

Contribution to our Knowledge of the Pathology of Epilepsy.

In an article in the *Allg. Zeitschr. für Psychol.* Dr. Krainsky writes he found that during twenty-four to forty-eight hours every epileptic seizure is preceded by a reduction of the amount of uric acid excreted in the urine. One to three cubic centimetres of blood of an epileptic person withdrawn during the *status epilepticus*, or during the pre-epileptic state of nervous disturbance, and injected under the skin of rabbits, produces paralysis of the lower extremities and intermittent spasms. The same conditions can be produced by hypodermic injection of *ammonium carbazotate*, which, during the epileptic spasms, is split up into urea and water. Krainsky believes that the presence of ammonium carbazotate in the blood is the real cause of epilepsy, and, so far, he seems to be borne out by facts—for the blood of epileptics, especially during the *status epilepticus*, contains a very considerable amount of carbazotic acid. —*Therapist*.

THE death-rate in New York during 1897 was the lowest on record, being 19.62.

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of January 24, 1898.

The President, W. E. KIELY, M.D.,
in the Chair.

W. EDWARDS SCHENCK, M.D., Secretary.

[TELEPHONE NO. 1981.]

DR. W. B. WEAVER exhibited and demonstrated the use of a number of instruments illustrating his paper on

The Electric Light in Genito-Urinary Diseases (see p. 255).

DISCUSSION,

DR. EDWARD H. SHIELDS: Dr. Weaver has shown us a beautiful display of instruments. I must take issue with the doctor in reference to his remarks upon the treatment and diagnosis of urethritis. In the treatment of urethritis the diagnosis as to the localization of the disease is of paramount importance, and the endoscope as an instrument will not aid us in our diagnosis. The use of the endoscope in posterior urethritis is seldom resorted to, for two reasons: Firstly, owing to the difficulty in passing a straight tube into the urethra; and, secondly, owing to the fact that when a straight tube is passed into the posterior canal, one of such a small size (No. 18 French) can only be used, and the tube must be so much longer than is used for the anterior canal that we can see nothing. It is for this reason that when we have a posterior urethritis, the neck of the bladder being involved, the use of the endoscope is of no value, for two reasons: Firstly, that we can see nothing; and, secondly, the difficulties encountered in passing the instrument. In cases of acute urethritis and cystitis the use of the endoscope is out of the question. In the treatment of chronic urethritis the use of the endoscope is of no value, because we have to deal not with a local lesion, but with a lesion involving perhaps the entire area of the mem-

brane. The discharge in cases of chronic urethritis persists simply because the posterior urethritis is not treated.

I wish to refer to the fallacy of a former method for diagnosing urethritis. This method consisted of filling one glass with the first portion and the second glass with the second portion of urine. If the first portion was cloudy and the second portion clear, the diagnosis of anterior urethritis was made; and if the first and second glass were cloudy, a diagnosis of anterior and posterior urethritis is made. We may have a posterior urethritis and have the first portion cloudy and the second portion clear, presenting, as you see, the same conditions as I found in anterior urethritis.

The cystoscope is a pretty instrument and has its place, like everything else. It is not so easy to see everything as the doctor would have us believe. Very often it is quite difficult to find a stone, and there are many instances reported of a stone being seen by the aid of the cystoscope, the operation made and no stone found. There is no better method than the old one, namely, the use of the sound for the detection of stone. In the female the use of the cystoscope is far more simple than in the male. Personally, if I had a tumor in my bladder I would not be satisfied to have a portion snipped off, but would prefer a high operation, when it could be seen and all removed.

DR. WILLIAM JUDKINS: Certain it is, if it was in order, a vote of thanks should be given the doctor for this beautiful display of instruments that he has shown us this evening.

One word regarding the cystoscope, the use of which the doctor has given such a graphic description. It is one thing to *tell* how it is to be used and another to *do* so. Judging from my own experience, and I know of others here who will agree with me, it is by no means as rosy as 'twould seem. For after sweating blood in your efforts to introduce it into the bladder, and exhausting the patience of your patient, who all the time is entertaining you with language that is far from classic, he goes away and frequently never returns.

You are then ready to discount the glowing accounts of many of its advocates, especially those of some of the medical centres in the East.

The most severe case of prostatitis it has ever been my fortune to see was brought on by the use of this instrument in the hands of one of the "beacon lights," not a thousand miles away, in his unsuccessful search for calculus, that after the subsidence of the attack of prostatitis was readily found with the Andrews' sound and removed by the supra-pubic route. Personally, I believe the sound is far preferable for diagnostic purposes than the cystoscope, as there are known cases where with it (the cystoscope) calculi have apparently been seen when on opening the bladder no stone was to be found.

DR. A. H. FREIBERG: I worked with these instruments in 1892, and brought a complement of such instruments with me when I came home, and have since added to that collection. The Casper instrument that the doctor has shown you differs only in accessories from mine. From observation and the experience of others I think it is an over-estimated instrument. I have examined a number of cases, but have never seen an urethral polyp; no doubt they exist, for they have been shown to me in bottles abroad, but it is evident that they are not an every-day occurrence. I have myself been enthusiastic in touching up these granulating patches, but now I have learned not to be too radical, and to consider the instrument a pretty toy. I have seen a clinic case that was discharged from one clinic as cured come to another to be treated.

The cystoscope is another matter, and the doctor has not said too much in its praise, though in vesical and renal disease it is not as easy to find the ureters and catheterize them as the doctor would lead us to believe. In 15 to 18 per cent. of the cases you are unable to find the ureters. My first effort was so easy that I was enthusiastic, but other attempts were not so successful. I think it is best used by the inventor. It is not easy to find the ureters, and when found not easy to get in, for you cannot move the instrument from side

to side very readily. Nitze considers it quite difficult, and he says that it "takes more than owning an instrument; it requires practice and skill."

DR. JOSEPH RANSOHOFF: A few years ago I had a patient with typical renal pyuria, but there was no sign by which we could locate the affected side. As he intended to go abroad I sent him to Nitze; when he returned he told me that Nitze had made the same diagnosis without the aid of the cystoscope. He died of myelitis, which was probably the causative factor of the other condition.

When the bladder is normal, or nearly so, it is easier to use the instrument, but when it is not so it is not such an easy matter. I have used the instrument and operated for a tumor of the bladder that two cystoscopes found, but the operation did not find the tumor. The picture of the bladder wall is often distorted, and any object the size of a grain of corn would appear in the cystoscope as large as the end of your finger. I think the acme of difficulties is reached, as far as the cystoscope is concerned, when we speak of irrigating the bladder with those small tubes, for the blood runs in faster than they can wash it away.

I agree with the previous speaker, that it is not as easy to see the ureters with the cystoscope as we are led to believe. I have opened up the bladder, and even then with my eyes had difficulty in locating them. Catheterizing the ureters, I should judge, is quite a difficult undertaking; it can more readily be accomplished in the woman, and Kelly has invented an instrument that will enable us to do so more readily in the man. The cystoscope is a valuable instrument in helping out a diagnosis.

The doctor referred to a gentleman who went to New York, where they made the diagnosis of tuberculosis of the bladder. Previously we thought it was a stone in his kidney. They said they could cure him in six weeks, which lengthened to months; then, after four years, he died of tuberculosis.

I do not think the instrument is more painful to pass than the sound, but I think it should be used as a last

resort in making a diagnosis. I cannot see that it has proven as eminently satisfactory as we had expected it would some four years ago.

DR. J. C. OLIVER: Dr. Weaver, what is the magnifying power of the cystoscope?

DR. WEAVER: About three times.

DR. OLIVER: That probably answers the question, asked by a previous speaker, as to why it is so much easier to see the orifices of the ureters with the cystoscope than it is without its aid.

DR. WEAVER: So far as our not being able to diagnosticate anterior and posterior urethritis with the endoscope is concerned, I desire to say that if there are symptoms pointing to an acute urethritis the instrument is contra-indicated. I have seen the instrument used with satisfactory results in both anterior and posterior chronic urethritis. I have not used the instrument often in the posterior form, because the introduction of the tube into this part of the urethra is quite painful; but I have used it frequently and with satisfaction in the anterior form. Therefore, I cannot agree that it is of such limited value. As for likening the instruments to toys, in that respect "*saws and hammers in the hands of children are toys, but men build houses with them.*"

The cystoscope has its place, but should not be used indiscriminately nor by the inexperienced. In sounding for stone, if there should be an encrusted tumor it would lead you to believe that a stone was present, but a cystoscopy will often obviate this difficulty. A fold of mucous membrane may be mistaken for a polyp on account of the laxity of the bladder wall, but distension of the viscus with more water will spread out this fold and prevent such an error. I saw such a case as this at St. Peter's Hospital (London).

I have had some experience in catheterizing ureters with the Casper instrument, doing so some forty-odd times. The opening of the ureter is sometimes difficult to find, but if the bladder is well dilated and you will patiently look for it, in the greater number of instances you will find it. The opening found, by Meyers' (of New York) rule the

catheter is easily introduced. His rule is to bring the cystoscope in such position that the opening of the ureter appears at the distal edge of the prism and is parallel with it. As has been said, the female ureter is not so difficult to catheterize.

In reference to the remark of sweating blood in the attempt to introduce the cystoscope, I recently had such an experience and failed to introduce the instrument, but intend to try it again with the aid of an anesthetic.

Wealthy Physicians.

A writer in the *St. Petersburg medicinische Wochenschrift* laments the fact that the obituary notices of so many physicians, especially in Russia, close with the words, "He died leaving nothing for his family." But he is glad to announce the names of three who have made large fortunes in practice. Professor Sacharjin is said to have left about a million and a half dollars, besides three valuable houses in Moscow. Sir William Mockinson, the late surgeon to the British Queen, has given one hundred thousand dollars to the University of Edinburgh as a fund for anatomy and geology, and twenty-five thousand dollars to the Royal Society.

Dr. Evans, the third favorite of fortune, and the court dentist to Napoleon III, suffered from delusions of grandeur, according to our author, for he left his fortune of five millions to his native town of Philadelphia. And, further, this money was given to erect an Evans Museum, in which the clothes and honors of the donor are to be displayed, and also to erect to his memory a monument in one of the public squares, to cost at least a million. This will be news to Dr. Evans' friends, we think. —*N. Y. Med. Journal.*

Obstetrics Versus Gynecology.

The more obstetrics advances the narrower becomes the sphere of the gynecologist, and it may well be said that the obstetrician of the future will be the best gynecologist, for he will practice the latter specialty by prophylaxis.—*Journal of Obstetrics.*

OBSTETRICAL SOCIETY OF CINCINNATI.

Meeting of October 14, 1897.

The President, C. L. BONIFIELD, M.D.,
in the Chair.

E. S. MCKEE, M.D., Secretary.

Case Report.

DR. THAD. A. REAMY: This specimen was removed from a case of carcinoma of the uterus, in which the infravaginal portion of the cervix had chiefly been destroyed, and on one side entirely. I present this specimen in order to call the attention of the members present to some peculiarities in reference to the patient and some difficulties I encountered in its removal. The patient was a woman, thirty-eight years of age, the mother of three children, one daughter nineteen years old. She gave the history of having lost weight very rapidly recently. She had never suffered much hemorrhage, but had an offensive discharge and some hemorrhage. Recently she had rapidly emaciated and had some cough. Physical examination of the chest revealed a chronic bronchial condition, but I could not find any positive evidence of phthisis pulmonalis. She had some diminished action of the kidneys, and she had at two or three intervals during the month shown some albumen in the urine. The uterus was almost immobile. It was, as you see, not very greatly enlarged, although it was larger than it appears here. It has been since its removal in a 5 per cent. solution of formaldehyde and is hardened. I was not able to drag it down, although I could get some mobility, but the most rigid examination failed to disclose any masses in the broad ligament. The patient's abdominal wall was very thin, and some fluid in the peritoneal cavity was perceptible. I could evidently remove the tumor most easily from below, although some operators, perhaps, could have removed it better from above. The history of the case indicated that the woman had about six months ago pelvic peritonitis, and after I saw her, which was about two weeks and a half prior

to the time that she came to me for the operation, going home she had an acute attack engrafted upon chronic pelvic peritonitis. A very considerable amount of fluid escaped from the cavity at the time of the operation, which I have no doubt accumulated during the recent attack, for it had that appearance.

I will not detain you with the description of the operation, further than to say it was more difficult than usual to deliver from below on account of the practical immobility of the uterus. I could not bring it down or carry it over, so I went up on each side of the uterus, incising and securing vessels. I used ligatures on one side, and a ligature and clamp on the other side. A very considerable quantity of fluid escaped, and the small intestines and omentum appeared in the wound. The large intestine, the colon, was adherent to the broad ligament quite firmly, so it was with considerable difficulty I could break it up on the left side. There were also adhesions between the cecum and the broad ligament on the other side. The small intestines were adherent to the upper portion of the uterus above. I separated these adhesions, crowded the omentum and small intestines back into the cavity, and put in iodoform gauze in liberal quantity around the clamp that was in, and left the ligatures long. Elevated the patient's hips so she was about on the level.

She has made a very nice recovery. At no time has there been more than a degree of temperature, and the pulse was at no time over 100. She did not vomit more than once. The cough, which was so distressing in this case, as in many other cases I have had heretofore of this character, was almost entirely cured by the ether. I have for a long time, instead of being deterred from the use of ether in certain cases of bronchial trouble, rather recognized the ether in these cases as a curative agent. I have also come to the conclusion that ether is less liable to damage the kidneys in these cases than chloroform, and it is infinitely more safe than chloroform; it is eliminated from the system by lung and kidneys quite as promptly as is chloroform, and the cases do better.

I present the case, further, in order to show that vaginal hysterectomy can be done in these cases even where there are extensive adhesions and where you are unable to bring the uterus down before the operation. The patient recovered rapidly from the general condition, from the state of anemia, cough and indigestion, for she had for the last year from time to time symptoms of ptialism—that is, she has had the derangement of the digestive apparatus characteristic of ptialism—from all of which she has recovered and will go home on Monday or Tuesday. The complete drainage that is secured by operating on these cases from below, the complete access which you can have to all adhesions with the hand, the absence of hernia after the operation, and the facility with which you can remove all the diseased tissue, are points to which I would call your attention. Of course, I am not now talking about cases where the disease has extended out to the pelvic wall and down below and out beyond the ureters, because I never operate upon cases of that kind. But I am becoming more and more in favor of doing these cases from below where it can be done.

There is one other point I will call attention to. I never in these cases stitch the peritoneum to anything. I never stitch the base of the broad ligaments one to the other. You get a completely closed vagina above in every case if the disease is completely eradicated if you sew nothing. This method will, I am aware, be pronounced a step backward. I may state that this case was referred to me by Dr. Smith, of Greenfield, O., and I was assisted by Drs. Smith, Gillespie, and the nurses in my hospital. The gauze was removed in seventy hours, and the last suture was away in five days after the operation. If small ligatures are used instead of fewer larger ones, including in each but little tissue, then drawn very tightly, they will come away in a very short time, with very little suppuration. However, I prefer, of course, in ordinary cases to use the clamps. By their use much time can be saved, which is an important item.

Vaginal Hysterectomy for Infantile Uterus.

DR. EDWIN RICKETTS: Mrs. J., aged forty-three, menstruated at sixteen years of age, very slightly and with marked suffering. Thereafter it was irregular and scanty, always accompanied with suffering. Married at twenty-three. Never was able to complete the marital act, never pregnant, suffering sometimes. Dilatation followed by curetting afforded no relief. It was done seventeen years ago by one of our local gynecologists. She consulted me in April, 1897. Upon examination I found a very narrow and short vagina and very small cervix. Depth of uterus two-thirds of an inch. Her suffering for almost two weeks out of every four was severe, and for the past two years she claimed that it had grown worse. I advised vaginal hysterectomy. This was done April 28, 1897, and with difficulty, as the vagina had to be dilated in order that working space might be obtained. First the lateral incision was made between the bladder and uterus, separating them so that the hysterectomy-needle could be brought into requisition. Ligatures were applied and the small uterus removed without accident. The peritoneum was not stitched across, so that the wound resulting from the removal of the uterus would be extra-peritoneal; nor were the ligaments brought down and stitched to form a diaphragm, but the vagina, after being cleansed by the simply "mopping-dry" process, was packed with a strip of iodoform gauze, which was permitted to remain for eight days, after which it was repacked. The ligatures are all away save one, which will be removed at the next visit to the city.

DISCUSSION.

DR. RUFUS B. HILL: There is other work before us to-night, and I will not go over all the interesting points in these cases, but only refer to the one or two that interest me most.

First, I am quite surprised at Dr. Reamy's remarks in reference to the use of anesthetics. It is his opinion that ether does better than chloroform in chronic bronchitis, and that it cures

these cases sometimes, and he advises it in preference to chloroform. Patients suffering from bronchitis used to die when I used it, and I quit using it for that reason. And the kidney cases, he says, get along better with ether. That is not my experience. I would like to go back to ether if I felt as Dr. Reamy feels in this matter, but in one year I had three deaths directly due to ether, one on the sixth day, one on the ninth and one on the twenty-third day. I thought that was too great a mortality from ether in one year. One had trouble from the effect on the lungs, and two from the bad effect on the kidneys. I have not had any such misfortunes as that from the use of chloroform. I have used chloroform, with but two or three exceptions, for more than four years, and I have had no accident of any kind that could be directly traced to chloroform. Of course, in ordinary operations, if the patient were to have a bronchitis, the ether would not hurt it much, but in the feeble old woman it would be different.

I do not agree with the essayist in reference to not sewing up the peritoneum in vaginal hysterectomy. I believe we should protect the peritoneum wherever it is possible to do it. Nobody can make a vaginal hysterectomy and not have sloughing and pus in the wound that would endanger contaminating the peritoneum. Of course, the opponents to this theory would say it is well sealed off with gauze that protects the peritoneum, and it does to a measure, but when you pack in gauze to the size of a fetal head almost you must necessarily have at the top of the gauze the intestines and omentum resting against it. They are agglutinated together before you take the gauze out. Adhesion takes place, and the intestines are more or less contracted and drawn into the wound. This is a source of danger to the patient subsequently in the way of intestinal obstruction. A doctor of Kansas City reported a case a year or two ago in which he made a hysterectomy and packed with gauze, and the coil of ileum was included in this contraction, and his patient had intestinal obstruction and died. He tried to get

a second operation, but was refused. He got an autopsy and showed the specimen at Richmond last year, at the meeting of the American Association of Obstetricians and Gynecologists. One-third of the calibre of the bowel was caught in the pelvic floor where the edges of the peritoneum should come together. I have a case now, a vaginal hysterectomy made a few months ago by a good physician who packed with gauze, in which there is complete obstruction, caused, I believe, by a coil of bowel caught in this way. She can only live on fluid diet. She and her husband refuse an operation for relief. The operation was a vaginal hysterectomy for cancer.

DR. REAMY: Are you sure it is not a recurrence of the disease?

DR. HALL: There is no indication of recurrence anywhere in the body; there are no enlarged glands. The condition came on within two or two and a half months after the operation. This woman is going to die, if she is not already dead, if she is not operated upon.

I have had some unpleasant experience from packing with gauze. The only case of vaginal hysterectomy that I have lost in the past two years was one that should not have died. The patient was as good a subject as I ever operated upon, except she took chloroform badly, vomited while she was still on the table and continued to vomit. I thought it was the chloroform. I waited eight or ten hours before I was satisfied that it was an intestinal obstruction. I found then a coil of ileum forced in between the layers of the gauze, so when I pulled the gauze out the ileum was glued to it and came out. I liberated it and replaced the gauze, but I lost my patient. I had closed the peritoneum many times before, and I said to my assistant that I would not close it this time, because other men do not close it and the patient was taking the chloroform badly. May be I would never lose another case, but if I can close the peritoneum and close every ligature off from the peritoneal cavity, I shall certainly do so. And you can do it perfectly, because the lymph is thrown out and closes them off from the peritoneal

cavity. Then you can, if you wish, pack the gauze loosely and protect the intestines.

DR. REAMY: You seek to close the flaps anteriorly and posteriorly above the ligature with which you secure the ovarian artery and the round ligament?

DR. HALL: I go above everything. I take a strong cat-gut, catch the anterior flap or fold of peritoneum as near the outer edge as I can, then I catch the broad ligament and then the posterior flap and I tie the end of my ligature then including this. Then I catch only the peritoneum over and over until I get one-half across. I can then pull it like a purse-string. I do that with strong cat-gut. Then I do the same on the opposite side. Then I tie the two ends like a purse string.

I do not want to differ from Dr. Reamy for the sake of differing, but I do differ from him on this point, because I believe it is an advance in the technique of vaginal hysterectomy.

Dr. Ricketts' case of gauze in the cavity eight days after the operation is four or five days longer than I like to leave it in.

DR. RICKETTS: That patient was the best I ever had; next time I will leave it in longer.

DR. LEROY COLTER: Owing to the fact that I very seldom see these patients before or after I give the anesthetic, I cannot form much of an opinion from personal experience on the subject, although I believe chloroform is preferable to ether in the pulmonary and also the kidney troubles. But possibly those who have the patients under observation some time after the administration of the anesthetic would be better able to judge than I would be.

DR. W. D. PORTER: I have always believed that ether predisposed to troubles with the lungs and kidneys, but I believe it does so indirectly—that is, that it is not necessarily an agent in that direction. I believe it predisposes to inflammations of the kidneys, and likewise of the bronchial mucous membrane, because it lowers the temperature. There is no doubt, I presume, in the mind of any man who operates that the effect of ether is to lower tempera-

ture. I have tested the matter several times where the ether was given simply for the purpose of examination, and I have invariably found a lowering of temperature, sometimes a degree and even a degree and a half, and in prolonged operations I have no doubt it has even greater effect. Nevertheless, I am inclined to think Dr. Reamy's statement may be true if he operates in a room that is warm, in the neighborhood of 90 F., or if he uses extreme care to preserve the bodily warmth of the patient, and in that way prevent this lowering of the temperature and the consequent ill-effects upon lungs and kidneys. I have given anesthetics quite frequently, and for the last six or seven years I have tried to avoid the ill-effects of ether in this way. I think I have never seen a case where there has been serious damage done to the kidneys, except one, which was a bad case in every way, and the damage may not have been due to the ether entirely. Nor have I ever seen a pneumonia or bronchitis that I could attribute to the ether. I believe the reason for this is that I have always taken care to preserve the bodily warmth of the patient. If the temperature of the room is cool, as it is sometimes, owing to careless arrangements, there will be very great loss of heat, and unless this is guarded against very carefully I think we will see many cases of injured kidneys and lungs. I remember reading, one or two years ago, the experiments of some German, who claimed he had proven experimentally that there was as much danger to the kidneys from chloroform as from ether, and he gave a number of experiments that would seem to prove that this is true, but the experiments were not made with reference to this element of heat, so I do not know how much real value they had. My belief is that if the operator is able to secure the assistance of an anesthetist who is capable of giving chloroform properly, his results will be as good, perhaps, as when he uses ether. There is very much more danger in giving chloroform if it is not given with great skill. The method of calling upon the most inexperienced man to give the anesthetic

should almost go hand in hand with the giving of ether, for ether may be given with comparative safety by any one. The danger is usually very slight from faulty administration, while with chloroform faulty administration is very dangerous at the time. The immediate dangers from chloroform are certainly a hundred-fold in comparison with those of ether.

DR. HALL: Where does the danger of a hundred-fold lie?

DR. PORTER: From getting too much in the system at one time. Chloroform is carried off very rapidly, and very little of it stays in the system during the operation, and only a small portion is necessary. If the patient, after a very deep inhalation of concentrated chloroform vapor, holds his breath for a sufficient time to allow the chloroform to get into the circulation, then you have a point of very great danger. Another thing, and here is perhaps what causes the largest number of deaths. The reporter in many cases of death from chloroform states that immediately after replenishing the cone the patient showed bad signs, and the anesthetic was stopped and everybody tried to revive the patient. The trouble I believe is the giving of too much chloroform just at that moment. The patient may seem to be coming out and the anesthetizer will put a large quantity on the mask, or whatever he is using, and the patient will inhale nearly pure chloroform vapor and will succumb just from the immediate effects of the chloroform. Unless you have a man to give it who understands that point and gives the chloroform uniformly, it is better not to use it. The best way, I think, is to use the Esmarch apparatus and keep dropping the chloroform at a uniform rate, which is very easy if you start in the right way. Then when you get the patient under, keep on giving it, keeping a space as large as a silver quarter, or perhaps smaller in size, moistened constantly. Then I think it can be given safely.

DR. HALL: Then, when the patient is profoundly off, you would not stop dropping the chloroform?

DR. PORTER: I would get the pa-

tient to the right degree of narcosis and hold him there by dropping the chloroform uniformly. It is by stopping the chloroform and then beginning it again and giving too concentrated vapor that trouble occurs. I believe the case of death after an interval of twenty-one days, mentioned by Dr. Hall, would be very difficult to attribute to the ether.

DR. HALL: The cough commenced at once with the giving of the ether and continued until the patient died.

DR. EDWIN RICKETTS: I began the administration of chloroform in 1879, and I have been an advocate of it from that day to the present time, and I want to say that I use no other anesthetic in my abdominal work. If a man believes that ether is the best anesthetic, he should give ether and not use chloroform; on the other hand, the man who believes that chloroform is better, should use chloroform altogether and not give ether. I saw a case under Mr. Tait's care die of ether bronchitis. Another case I saw die under the care of another operator from what we call "shock." I have never seen any bad result from chloroform. I do not want to be understood as saying that chloroform is not dangerous, for all anesthetics are dangerous. As for the quantity used, there is too much used. A teaspoonful for an operation lasting twenty or thirty minutes is enough. The point that the trouble is due to too much chloroform given at one time, I think, is well taken. The theory that ether is not harder on the kidneys or lungs than chloroform is rather new to me, and I was rather surprised to hear Dr. Reamy express himself in that way. As to the administration of chloroform, I want to say there is another point to be taken into consideration, and that is not to be in a hurry to push the patient off. Give them time. If you start with the patient in a nervous state of mind it is not as good as if you start with them calmly. This subject is a very interesting one and one in which I have been especially interested. I have never regretted the use of chloroform. As to the A. C. E. mixture, I did try that for a while, and the result was I had more scares in the same length of time than I have ever

had at any other time in my life. Perhaps I do not know how to use it.

DR. MAGNUS A. TATE: I would like to inquire how Dr. Porter believes we should give ether. Should the patient be put under the influence of it in say five minutes, or should we take say fifteen or twenty minutes, going very slowly?

DR. PORTER: When I give ether I always try to get the patient under in six minutes.

DR. JULIA W. CARPENTER: One good point made by Dr. Ricketts, that I think holds good with reference to other things as well as the giving of ether and chloroform, was that it is better to adhere to the method with which one has the best success. It is often observed that one will acquire skill with a certain method or remedy while another does not, hence contrary experiences about the same thing need not overthrow each other, nor deter the one that has acquired the skill from continuing with his own method.

DR. CHAS. L. BONIFIELD: Some years ago I gave anesthetics a good deal, gave them for Dr. Reamy in nearly all of his operative cases for a number of years. He and I have come to somewhat different conclusions about anesthetics. I thoroughly believe that ether is much the safer anesthetic in the majority of cases, but I think any one who confines himself to one anesthetic when there are two good ones is simply not making use of all the instruments he has at hand. I am ready to believe what Dr. Reamy says about his cases of bronchitis getting well, but I am also ready to believe that that is the exception and not the rule. I think his experience in that line, just as one man's experience in any line may be, is not the experience of the profession in general. I have a number of times had occasion to have patients anesthetized, in the last few years, when they were suffering with bronchitis more or less severe, and in quite a large proportion of those cases I have commenced with ether and been compelled, from the stoppage of the air-passages with mucus, to change to chloroform, when they would take the anesthetic comfortably, and, as far as we could judge, safely.

So I have come to avoid ether in those cases, following the general consensus of opinion that ether is dangerous in cases of pronounced bronchitis. But we can see how ether, if it does not kill the patient, may cure him. It irritates the mucous membrane, and when treating inflammation we often try to produce a cure in a similar way. Thus we often cauterize sores on the outside of the body, or treat a chronic pharyngitis with strong solutions of silver nitrate. Nevertheless, I believe ether is dangerous in these cases. It is better to use chloroform and trust to other well-known remedies for the bronchitis.

In reference to the nephritis many days after the operation, I think those cases are largely due to the exposure of the patient. Many operators permit their patients to be too much exposed in a room that is comparatively cold. The ordinary operating-table is iron, and most operators have only a sheet thrown over that, and the whole body, almost, exposed to the air. Under such circumstances the heat is rapidly dissipated, and we know chills from any source predispose to congestion of the kidneys. So I think the troubles often referred to ether may be due to other things than the anesthetic itself. Chloroform is certainly much the more pleasant anesthetic. I wish I were not afraid of it; I should infinitely more prefer to give it to my patient. But I believe if I were to take an anesthetic myself I should take ether because it is safer. So, as an operator, I do not think I should consult my own comfort, but rather the safety of my patient.

DR. HALL: What is a warm operating-room?

DR. BONIFIELD: About 85° to 90° F., never less than 85°.

DR. HALL: I would like to speak of two or three points. In reference to the patient losing heat, that is a well-known fact. Any man who would not protect his patient in this regard during an operation, if it were possible, would certainly be guilty of a criminal act. I never saw a section made in an operating-room that was cold in my life.

DR. PORTER: What do you call a cold room?

DR. HALL: A room below 80° F. is a cold room for a section.

DR. REAMY: I have seen plenty of them made at 75° F.

DR. HALL: Two of my patients died from ether from suppression of the urine and in uremic coma. I could not get an autopsy to prove they had preëxisting kidney disease, but if they did there was nothing in the urine before the operation to lead one to suspect it. They were not operated upon in a cold room, nor was the anesthetic given poorly. I believe in those cases the anesthetic, plus the operation, was directly responsible for the nephritis. I could not, of course, say whether or not they would have died if they had taken chloroform. But I am strongly inclined to believe that they would not have died from nephritis if they had taken chloroform. Early in my work I had impressed upon me the necessity of protecting the patient from cold. I operate upon a table of iron and glass. I protect the tables thoroughly with blankets covered with a sterilized sheet. I take each leg and wrap it separately in a hot blanket. I always operate in a room so warm that my visitors often complain of it, and sometimes my assistants complain of the heat.

DR. REAMY: I would like to ask Dr. Porter if in his observation the temperature has gone down as much under chloroform as under ether?

DR. PORTER: I have never made those observations with chloroform. I am quite certain, though, that the temperatures does not go down so much with chloroform because the chloroform does not tend to dilate the capillaries of the skin as much as ether does. I can corroborate Dr. Hall's statement as to his care to protect his patients from loss of heat. There was one point occurred to me a moment ago, that is that ether, if allowed to stand in a partially filled can, especially in a warm temperature, undergoes decomposition with formation of acetic acid, and is then very irritating to the lungs, and it takes a long time to get the patient under the influence of it. I know one instance such as this, in which the patient coughed and required a long time to get any effect from it. By getting a fresh can the patient was

soon anesthetized. A man who operates but seldom should get small cans. If he uses a large can it should be tightly corked and put in a cool place, preferably in an ice-chest.

DR. REAMY: I have no doubt that in the report of this meeting to-night it will seem rather anomalous that we should go from the discussion of vaginal hysterectomy and technique, and vaginal versus abdominal hysterectomy, and sewing the anterior and posterior folds of the peritoneum and leaving them unsewn, to an earnest discussion of the dangers of these two agents, ether and chloroform, and their relative merits. Yet there is such diversity of opinion and such diversity of method in the administration of these respective anesthetics that it is probably quite as important to the interests of our patients and to the credit of surgery in this neighborhood that we should dwell upon this subject from the point of view of our clinical experiences and our observations. I shall shortly offer a paper to the Academy upon this subject, and will not now go into it *in extenso*. But I have clear convictions, and will be pardoned if I express them. Dr. Porter has without any doubt given you a very important point, a point which has been elaborated in the notes taken in the work in my own hospital in the last two years, and it is on the work done there that I shall found the clinical paper which I shall offer upon this subject. The dilatation of the capillaries from ether is very striking. The reduction of temperature is a uniform condition, and without much doubt is associated to some extent with dilatation of the capillaries and the rapid and enormous exhalations from the skin. Now, with this condition, every man knows that it is absolutely essential that the patient should be protected from cold. I can see no reason for discussing how my friend Dr. Hall protects his patients. The case he lost twenty-three days after the operation may have had organic disease of the kidneys, and may have died anyway. It may have been his skill and care that preserved her twenty-three days. I have seen many sections at a temperature of 75° F. For many

years I was compelled to do many operations in a hospital with a temperature of about 75° , but in my own hospital I will not operate under any condition with a temperature less than 95° F., and I prefer it above that. And particularly I would not operate in a temperature less than that on a woman with bronchial trouble. I am not so sure but it may be true that the high temperature to which these women are subjected, and the enormous activity of the skin and the changed condition of the capillaries associated with it, and the influence of that temperature upon the bronchial mucous membrane, now supplemented by the direct action of the ether upon the bronchial mucous membrane, the combined action of these agents resulting in arrest of bronchial cough. But under these circumstances, with a warm room, with the increased action of the skin, with the stimulation of the bronchial mucous membrane, if the patient is not only protected at the time of the operation, but the protection continues sufficiently long, you may have secondarily an increase of cough, and serious damage to the kidneys. This, in my opinion, would explain many fatal cases. I know in very many of these subjects, especially in cases of malignant disease, there is involvement of the kidneys and the ureters; and, indeed, one of the most uniform conditions in a carcinoma of the uterus is involvement of these organs, if the disease is extensive and has existed for some time. It is not logical to conclude that in all of these cases, because you find subsequently trouble from the kidney, that it was due to the anesthetic; on the contrary, the kidney trouble existed before the anesthetic was administered. In the same connection, the German authority referred to by Dr. Porter demonstrated that a larger proportion of chloroform is retained in the brain and in the general system after anesthesia from chloroform than under the same condition in ether, although the ether is longer in being eliminated. But in all of the cases of death from chloroform in this city, of which I have had knowledge, after the first few inhalations, or, as Dr. Porter has described, when the

person giving the anesthetic replenished the anesthetic, the trouble occurred. The method suggested by Dr. Porter is more safe, because it prevents an excessive amount being given, and thereby prevents the paralyzing of the motor centres and then the heart. And in the other instances of death at commencement of inhalation the cardiac ganglia are paralyzed by direct action of the drug. A large amount of atmospheric air with chloroform is the element of safety, together with uniformity of administration. Not so with ether.

Now for the method of administering the ether. Let the patient commence taking it with the cone held far from the mouth and then closer and closer, and finally put the cone down over the nose and mouth. As soon as the patient begins to strangle, let her take two inspirations with the cone removed, then put it on again and continue it. Do not consume more than three to five minutes in getting patient under. Then keep her under until the operation is through, but as a rule do not replenish the cone with ether unless operation lasts more than forty minutes. By this method the patient inhales considerable CO_2 of her own manufacture, and thus requires less ether. I recently saw a very distinguished operator in this city have a patient etherized, and it required fifteen minutes, in another case twenty minutes, and yet everything seemed satisfactory. Certainly by such methods more ether is introduced into the system. My nurses give ether as a rule. Before the inhalation commences I speak to the patient, obtaining her confidence, soothing her mind, allaying her fears. This precaution is, in my judgment, of value.

In reply to Dr. Hall, let me say, in many cases where the patient showed considerable bronchitis without much expectoration, I have given ether, and in but one solitary case has the patient not been benefited by the ether. The cough has subsided. This is not a speculation nor an accident, but a matter of clinical record.

Now we come to the question of sewing the peritoneum. In reply again to Dr. Hall, I know the force of my

friend's statement from his rapidity as an operator and the facility with which he could do this, but in a number of cases I have operated upon, and in this identical case, the high position of the ovarian artery and the upper portion of the broad ligament, and they could not be brought down, would have made it necessary to have closed the anterior and posterior peritoneal flaps from below. And much of the pelvic cavity would have been below the flaps. I have done one hundred cases of vaginal hysterectomy within the last two years and a half in this way, with the clamp and ligatures, but chiefly with the clamps, and in not a solitary case have I had an obstruction or hernia. I do not think the method favors prolapse.

As for the infection of the peritoneum to which my friend refers, this is exactly the procedure to avoid it. I leave it open, first, because you abridge the time of the operation one-third in every case where you have not had difficulty. Secondly, you cannot close the peritoneal cavity, even by the purse suture, so it is proof against infection from below if you close the peritoneum from below. Third, if there is any fluid in the peritoneal cavity or there should be any hemorrhage from any separation of adhesion, your beautiful closure, your diaphragm of peritoneum, has shut it off and you only have access to that which is below. Whereas, if you do not close the peritoneal flaps the whole field drains thoroughly and quickly.

My friend has said you never have these cases without a long-continued pus discharge, especially after clamps. If you include but little tissue in each ligature and tie them tightly and cut a short stump or button, and have ligatures thoroughly disinfected, the amount of pus will be very small.

I am utterly opposed to closing the peritoneal cavity. I think that "advance," so-called, in surgery is a mistake, and the recession from it will be the rule in a few years. I again repeat that the ultimate condition of the vagina is better when it has not been done.

THE

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Editorial.

THE ACADEMY OF MEDICINE OF CINCINNATI.

Last Monday evening at the annual meeting the following members were elected as officers for the ensuing year:

President—Dr. Louis Schwab.

First Vice - President—Dr. J. C. Oliver.

Second Vice-President—Dr. Estella Riley.

Treasurer—Dr. S. E. Allen.

Secretary—Dr. W. H. Crane.

Corresponding Secretary—Dr. F. E. Kugler.

Financial Secretary—Dr. M. A. Tate.

Librarian—Dr. A. I. Carson.

Trustees—Dr. N. P. Dandridge, Dr. J. A. Murphy and Dr. J. T. Whittaker.

The usefulness of the Academy cannot be exaggerated. Its influence has become National. With a membership of nearly four hundred, it embraces most of the active members of the regular medical profession of Hamilton County. In fact, the Academy is more than a county organization, as reputable physicians are not excluded from membership by reason of geo-

graphical lines. In this respect it approaches the functions of a district society. The meetings are usually largely attended, and the hour of adjournment extended. The place of meeting is particularly inviting and central. The physician who is within a half-hour's ride on the railway and does not attend is not doing justice to himself. Those who go get the benefits, while those who do not are losers beyond expression.

An organization like the Academy is useful and influential in direct proportion to number of its active members. For this reason the membership-list should be boomed and lengthened until it embraces five hundred additional members. There are in Hamilton County more than six hundred known reputable physicians of the regular school, with not less than one hundred and fifty in the adjacent counties of Kenton and Campbell in Kentucky, all of whom should be known as members of the Academy. The Kentucky members have their own local organization, which is quite right; so have members of the local profession of Walnut Hills and Cumminsville, but the Academy is the great centre. Upon its floors are read not only the very best of scientific papers, but the discussions are of a high order. The proceedings may be read every week in the LANCET-CLINIC, but to hear the voices of the speakers and imbibe direct their words of wisdom is after all the great desideratum.

A united effort all along the line should be made to gather in outsiders. Show them that they cannot afford to be out and in an unrecognized condition. They are more or less exposed to damage suits for malpractice while out of the fold. Their condition is not one of professional good health. They should be gathered in.

Dr. Schwab is in every way a splendid man and physician, and will be an excellent presiding officer. As much may be said of every one elected to serve with him in an official capacity. Full of vim, vigor and wisdom, they will push things, and affairs medical will be lively during the unsuaging year.

THE OHIO STATE MEDICAL SOCIETY.

The officers of this organization announce that Dr. Nicholas Senn will deliver the annual address on surgery and Dr. Hobart A. Hare the address on medicine.

Dr. W. E. Bruner, State Chairman of the Rush Monument Committee, directs attention to the necessity of the medical profession of Ohio coming to the front with subscriptions to this fund. One hundred subscriptions of ten dollars each, two hundred of five, five hundred of two, one thousand of one dollar and two thousand of fifty cents will accomplish the desired purpose. This is none too much for a splendid body of physicians numbering five thousand to raise. There is scarcely a man in the entire number who cannot donate one dollar for this purpose, while others can easily meet the small but larger sums mentioned. Let the subject be taken up heartily and with a right good will and it will be easily accomplished. County and other societies should take it in hand. Do not forget that through the President of the Ohio State Medical Society two thousand dollars was pledged at the meeting of the American Medical Association. This was done by him upon the advice and suggestion of the Ohio delegation. Colorado and other State societies pledged as much, and, what is more, have raised their share of the promised contributions. Ohio cannot afford to be a single step or dollar in the

rear. Dr. E. W. Mitchell, of this city, is authorized to receive contributions. Don't shoulder this off on those thought to be rich in worldly goods. The Rush Monument is a national affair in which every American physician of this age should have a little financial interest. An equivalent of between one and two dollars from every regular physician will do the work handsomely. Ohio men should be right up at the front with their contributions; that is where they belong, and cannot afford to be down towards the middle or foot of the line. Attend to this at once. Send donation to Dr. E. W. Mitchell. It should not be necessary to make future appeals.

The annual Transactions of last year's session of the Ohio State Medical Society have not yet put in an appearance.

DR. CHARLES B. KELSEY.

Dr. Charles B. Kelsey, a well-known specialist in rectal surgery, who had held a professorship in the Faculty of the Post-Graduate Medical School and Hospital since 1890, was removed by a vote of the Board of Directors of the institution at the beginning of the present year. The reason for this action was that Dr. Kelsey had notified the Corporation Counsel of the city that the annual report of the hospital, which receives from the public funds thirty-eight cents a day for each infant cared for by it without charge, was misleading, in that it claimed ten thousand more days' free care for infants than it was in reality entitled to. He also expressed opposition to the expenditure of certain endowment funds to meet current expenses of the hospital. Accordingly, charges of improper and disloyal conduct were preferred against him. After his removal, Dr. Kelsey instituted proceedings in the Supreme Court for reinstatement, claiming that he had been dismissed without a hearing, to which he was legally entitled, and that such a removal could be made

only by a three-fourths vote of the entire Board. On February 21 Judge Pryor, before whom the case was tried, rendered his decision in Dr. Kelsey's favor, and ordered the Board of Directors to reinstate him in his professorship.

The above, taken from the *Boston Medical and Surgical Journal* of March 3, tells a story easy of interpretation. The moral which might be appended is: Members of hospital staffs should understand that their position and tenure is dependent upon closed eyes and ears to any mismanagement or dishonesty in the institutions served by them, which the board calls loyalty.

In a hospital located in this city there are members of staff of ten to twenty or more years' standing, who are not known to have seen anything improper or out of normal conditions during their term of service. In this same institution there exists a hyper-esthetic condition of the nerves of the Board of Trustees which irritates them so seriously that criticism, just and true, is followed by a drop of the Lord High Executioner's ax, same sort of guillotine used in Cincinnati as in New York, works same way under similar provocation. Results are a little different owing to constitutional causes. In New York the critic is restored by order of the Supreme Court; in Cincinnati the criticism lowered the admittance of patients in one month 25 per cent., and since to a greater percentage. Recovery of old numbers has not yet taken place.

Who cares to stand mute in the face of wrongs? "Not I," says Dr. Charles B. Kelsey, of New York. By the way, what were the other members of the staff of the New York Post-Graduate Medical School and Hospital doing when Dr. Kelsey made his exposures of dishonest practices? Were they out of

the city, buying oxen, in the act of getting married or burying their dead? Certainly some one beside himself must have been on duty with him. In newspaper parlance, such things are puzzling to doctors. Did any one come to his support, or was it a mutual stand-in on the part of staff and trustees? The writer does not know, but does recognize the hypersensitiveness of boards of trustees, and they ought to be sensitive under such charges as those made by Dr. Kelsey. Shakespeare, or some other worldly-wise man, once made some pertinent remarks about a bending of the pregnant hinges of the knees, that thrift might follow fawning. Humble pie is fattening, the taste is oleaginous.

For a moment mentally gaze upon a board of trustees of a public institution charged with immoral conduct in endeavoring to cheat the public through misrepresentation, and found guilty at the bar of a supreme court. Behold the board! What do the members think of themselves? Couldn't bear criticism, and felt bad because they were bad; sought vengeance by punishing the exposé of their evil ways, and fell—yes, fell. Who was hurt? Certainly not Dr. Kelsey, for he is to be congratulated by all honest and honorable men. The medical profession, all general hospitals and the public would be better off if his tribe were more numerous.

THE KENTUCKY STATE MEDICAL SOCIETY.

The Society will meet this year at Maysville, on the 11th, 12th and 13th of May. The physicians of Maysville already have their banners of hospitality upon the outer walls of their county seat.

It is not a question of debate as to whether the medical men of the State

should or should not go to the meeting, but to go. Papers are being prepared that deserve attention. The moment a Kentucky doctor stands upon his feet he talks, not mechanically, but oratorically. These annual occasions bring him out and at his best. Some from Ohio and West Virginia will be there. The meeting will be large, so much is assured, and the stay-at-homes will be sorry and without sympathy. Dr. H. K. Adamson, of Maysville, is Chairman of the Committee on Arrangements, and he is an adept at arranging.

The Kentucky Legislature has turned down the osteopaths. Quackery tries in vain to obtain a foothold in the Blue-Grass State. Through well-known hereditary influences, the medical profession of Kentucky live right straight along upon the highest social plane, every member as proud as Lucifer, large hearted, but tender and gentle, guileless and brave.

It is in the air that the society will present the name of Dr. J. M. Mathews to the American Medical Association for the Presidency of that organization. A better selection could not be made or a more worthy and deserving one. The band will play "Hail to the Chief."

THE OHIO REGISTRATION LAW WORKS.

In some quarters there seems to be an impression that the Ohio law is not being enforced as vigorously as desirable, which may possibly be true; and yet evidence of life crops up now and then that indicates a good degree of vitality.

A goodly number of indictments have been found by the Hamilton County Grand Jury, but the offenders keep right on in business at their old stands and in their old ways. It does

seem as though something could be done to stop the iniquity. A man who steals or commits any other crime is certainly not permitted to keep on stealing after arrest and giving bond. Just as in case of so-called practitioners of medicine who are out under bond, such indictments may stand for weeks, months and even years unless the prosecutor takes them up and brings them into court. The attention of the State Board of Medical Examiners is called to this condition of affairs in the south-west corner of the Commonwealth.

It seems that in Columbiana County the authorities are more wide awake and alive to this sort of transgression of the law, as indicated by the following letter:

COLUMBIANA, O., March 5, 1898.

Editor LANCET-CLINIC:

Last week two itinerant so-called physicians, Indian medicine men and proprietors of a variety show, came to this town, and straightway proceeded to violate the act regulating the practice of medicine in Ohio, *alias* the Mosgrove Law. An affidavit filed in the office of the Secretary of the Board of Medical Registration led to the issuing of a warrant for one of the gentleman, W. H. Long. He attempted to escape into Pennsylvania, but was overtaken by the Sheriff of Columbiana County before he could come to his desired haven, and was taken before the court at Lisbon. The following day, March 4, he pleaded guilty, and was required to pay the costs and a fine of thirty dollars.

E. J. WHITEHEAD.

A CONSIDERATION.

The Cincinnati Hospital Trustees will do well to consider at this time the propriety of lessening the number of internes and reduction of other parts of the force in that institution. Life tenures on the part of the staff is an outrage, pure, plain and simple, upon the mass of practitioners not on the list. Think of thirty years on the hospital staff, when there are forty or more men

who would be glad of such an opportunity for one to three or four years! Others are there for fifteen or more years, who have been literally educated in their profession in that institution. Are they qualified? Yes; but so are a hundred others, with equal claims.

Last year, somewhere along about this time, the Trustees enacted a rule by which appointments were made for one year only. The old fixtures staid; they are the advisors of the board. Any new blood? Well, none to hurt or do much good that has yet been heard of. Is it worth any man's while to make application right now? Hardly, under the present administration. In fact, the query is often made as to whether the Cincinnati Hospital is a public or a private institution. The tax-payer says the former, the medical profession the latter. Listen to an echo. Here it is in a voice from Kansas:

DODGE CITY, KANSAS, Feb. 28, 1898.

Editor LANCET-CLINIC:

My Dear Doctor:—I desire to express my appreciation of your energetic editorials as they appear weekly on questions of so vital an importance to physicians. You have certainly taken an advanced stand, and withal a most righteous one, in advocating "protection" to the legitimate practitioner as against quackery, the "hospital abuses" and short college terms. May the benediction of "a well-spent life" and the prosperity you so richly deserve rest upon and abide with you evermore.

Very truly and fraternally,

S. J. CRUMBINE.

EDITORIAL NOTES.

"HOTEL ACCOMMODATIONS AT DENVER.—The hotel proprietors in Denver, with the usual shortsightedness of people of that class, are purposing to make it as uncomfortable as possible for those in attendance at the meeting of the American Medical Association in June, in order that the meeting may be made as profitable as possible to themselves. The manager of one of

the leading hotels in that city has already refused to make any reservations unless two persons will consent to occupy a single room. How many he expects to put into a double room we have not yet ascertained."

The above from the New York *Medical Record* of February 19 harmonizes with the Railway Passenger Agent's proposition made to members of the nominating committee at Philadelphia, which was to the effect that a vote for Denver as place of meeting in 1898 insured a railway pass for the voter, and has never been contradicted by either the railway agent or members of the committee. It should be kept prominent before the medical profession, in order that measures may be adopted to cut short corrupting influences in the future. The scheme was one of barefaced and shameful bribery.

REPORT OF THE HEALTH DEPARTMENT OF CINCINNATI.—Following is the statement of infectious and contagious diseases for week ending March 4, 1898:

	Cases.	Deaths.
Measles.....	35	2
Diphtheria.....	5	..
Scarlet Fever.....	10	1
Typhoid Fever.....	8	1
Phthisis Pulmonalis.....	10	12
Membranous Croup.....	1	..
Pertussis.....	32	3
Varicella.....	22	..
Total.....	123	19

The mortality report for the week ending March 4, 1898, is as follows:

Dysentery.....	1
Measles.....	2
Scarlet Fever.....	1
Typhoid Fever.....	1
Whooping-Cough.....	3
Other Zymotic Diseases.....	5—13
Cancer.....	5
Phthisis Pulmonalis.....	12
Other Constitutional Diseases.....	1—18
Apoplexy.....	2
Bright's Disease.....	1
Bronchitis.....	7
Convulsions.....	5

Gastritis and Gastro-Enteritis.....	6
Heart Disease.....	5
Meningitis.....	4
Nephritis.....	5
Peritonitis.....	1
Pneumonia.....	12
Other Local Diseases.....	11—59
Deaths from Developmental Diseases..	11
Deaths from Violence.....	6
Deaths from all causes.....	107
Annual rate per 1,000.....	13 73
Deaths under 1 year.....	21
Deaths from 1 to 5 years.....	15—36
Deaths during preceding week.....	117
Deaths corresponding week 1897.....	103
Deaths corresponding week 1896.....	120
Deaths corresponding week 1895.....	123

OBITUARY.—Dr. William H. Bunker died at his home in Hartwell, O., on March 6. Dr. Bunker graduated in the Medical College of Ohio in 1874. He was elected Superintendent of Longview Asylum, and served a term of five years with much credit to himself. He afterwards located in Hartwell, where he practiced until ill health obliged him to relinquish his calling. Dr. Bunker was a most honorable practitioner, beloved by a host of friends.

PUBLISHER'S DEPARTMENT.

THREE-thousand-dollar "Ohio" practice, in growing city of fifteen thousand inhabitants, to be given to purchaser of my horses and vehicles, office equipment, etc. Reason for selling, will enter specialty. Address "ADVANCE," care of LANCET-CLINIC, Cincinnati, O.

CLEANLINESS IN CATARRHAL AFFECTIONS.—One of the fundamental principles in the treatment of catarrhal troubles of the nose and throat may be summed up in a single word, "cleanliness." To permit secretions to remain on the surface of the inflamed mucous membrane is to increase the existing irritation and delay the healing process. The retained mucus and crusts form a fertile soil for the growth of microbes, and, after undergoing decomposition, act as severe irritants. It follows, therefore, that means should be taken to remove these inflammatory products and keep the mucous membranes as clean as possible. All rough manipulation should be avoided; the object is not to scrub off the

mucus and crusts, which are often quite firmly adherent, but to dissolve them and wash them away. For this purpose an alkaline antiseptic solution such as Bensolyptus (Schleffelin) is especially indicated. Experience has shown that an alkaline fluid is not only the best solvent for mucous, but also exerts a soothing effect upon the inflamed mucous membranes. In Bensolyptus these beneficial effects of the alkaline ingredients are supplemented by its antiseptic and anti-catarrhal properties, in consequence of which it arrests all growth of microbes and facilitates the process of healing. In the various forms of rhinitis, pharyngitis and tonsillitis, Bensolyptus has proved an important auxiliary in the treatment by promoting cleanliness, allaying irritation and preventing bacterial infection.

Bensolyptus is the outcome of careful experiments made in the laboratory of Schleffelin & Co. to produce an ideal alkaline antiseptic fluid, and the high reputation enjoyed by the products of this firm for over a century renders any further comment unnecessary.

DR. F. M. JOHNSON, of No. 117 Beacon Street, Boston, pays the following deserved compliment to The Maltine Company:

"For more than fourteen years I have constantly made use of a number of your preparations, and it gives me much pleasure to state that the results have been uniformly and eminently satisfactory.

"Maltine with Cod Liver Oil,' I have prescribed very frequently. My patients take it readily, and it is easily assimilated.

"Maltine with Cascara Sagrada' has proved in my hands to be the ideal tonic-laxative. It has never disappointed me, and I have given it in hundreds of cases.

"Malto-Yerblne' is of great value as an adjunct in the treatment of all bronchial difficulties."

DR. A. M. RITTER, of Milo, O., January 29, 1898, writes: "I wish to speak especially of the merits of Papine as an analgesic and sedative. I have had success with it when all other remedies of like character had failed. One case in particular of intestinal indigestion, in a child twelve months old, attended with a great amount of pain and extreme nervousness, and insomnia. The remedy worked like a charm in relieving pain and giving rest. The remedy was given in five-drop doses to begin with, as required to give rest and relieve pain. Papine was used in this case for at least six months, in increasing doses, without doing the least harm. It has been now three months since Papine has been discontinued, and the child is in perfect health. I consider Papine one of our most valuable remedies as a pain reliever and nerve sedative in well-selected cases."

Selections.

FROM CURRENT MEDICAL LITERATURE.

Cerebral Infection with the *Bacillus of Influenza*.

The invasion of the cerebral tissues by the influenza bacillus has been regarded as of doubtful occurrence, the cases of such invasion reported not being accepted as demonstrative.

Pfuhl, who has published a number of such cases, has recently contributed three more to the list.

In two of these cases the only definite anatomical change recognized macroscopically was an increase of the cerebro-spinal fluid, which was somewhat blood-tinged. The other case presented the appearance of purulent lepto-meningitis. The bacillus of influenza was cultivated from the cerebro-spinal fluid, and its identity apparently well-established in two of the cases, while in the other case a bacillus, resembling that organism in morphology, was found microscopically, but not by cultures, in the cerebro-spinal fluid and pleural effusion.

One of these cases was of peculiar interest, in that the microscopical examination of the various viscera as well as of the tissue of the brain and spinal cord showed the presence in all of these tissues of numerous small bacilli like influenza bacilli in morphology.

The case was a rapidly fatal influenza with cholera-like symptoms.

In the microscopical sections of the brain, lymph spaces, blood capillaries, and small arteries were found containing these bacilli, in some instances in clumps and masses. They were also seen inside the large nerve cells, sometimes in considerable numbers and also scattered throughout the tissue. The spinal cord showed a somewhat similar condition. No reaction or inflammatory change was evident in the tissue. The small intestine showed some loss of epithelium, desquamation of the cells of the glands and edema of the submucosa. On the surface of the mucosa the influ-

enza-like bacilli were present in enormous numbers. They were also observed in glands, in the lymph vessels and scattered through the submucosa. The bacilli were also found more or less numerously in the liver, kidney, pancreas and axillary lymphatic gland. On the pneumonic exudate of the lungs they were also numerous as well as in the interstitial tissue and capillaries of the organs.

It is unfortunate that the identity of these bacilli, found in such numbers microscopically in the various tissues, was not established by cultures. As the case stands it is by no means certain that the author had influenza bacilli before him, but the observations are suggestive.—*Boston Med. and Surg. Journal*.

The Nature of the Flagellate Forms of the Parasite of Malarial Fever.

In the blood of birds, parasites similar to the parasite of malarial fever are sometimes found. Opie about a year ago called attention to the fact that in the hematozoan infection of crows, two forms of the adult organism could be distinguished, and suggested that one of these forms only might be capable of developing into the flagellate form of the parasite.

MacCallum has more recently found that Opie's suggestion is the fact, and has further found that the flagella of the parasite may separate themselves from it and, as small motile filaments, may be observed to wriggle about the other adult forms. One only of these motile flagella penetrates the body of the parasite, which then undergoes certain changes in shape and appearance to become transformed into another form of the organism.

The occurrence of the flagellated forms of the malarial parasite of course suggests a similar function for these flagella and MacCallum has been able to demonstrate that such is the truth. From his observations of the blood in a case of malarial infection of the estivo-autumnal type, in which there were a great number of so-called "crescents," he writes as follows:

"These (the crescents) in a freshly-

made slide of blood, with very few exceptions, retained their crescentic shape for only a few minutes. They soon drew themselves up, thus straightening out the curves of the crescent, while shortening themselves into the well-known ovoid form.

"After the lapse of ten or twelve minutes, most of them were quite round and extra corpuscular, the 'bib' lying beside them as a delicate circle or shadow of the red corpuscle. After twenty to twenty-five minutes certain of these spherical forms became flagellated; others and especially those in which the pigment formed a definite ring and was not diffused throughout the organism, remained quiet and did not become flagellated. In a field where an example of each form could be watched the flagella broke from the flagellated form and struggled about among the corpuscles, finally approaching the quiet spherical form; one of these entered, agitating the pigment greatly, sometimes spinning the ring about. The rest were refused admission, but swarmed about, beating their heads against the wall of the organism. This occurred after thirty-five to forty-five minutes."

After this the organism became somewhat larger with long movements in its interior and no further changes were observed.

MacCallum regards this process which he has observed in both species of hemotozoa as one of fertilization and the motile flagella as a form of spermatozoa.—*Boston Med. and Surg. Journal*.

Turpentine in Scarlet Fever.

Pujadory Fauva writes in the *Gaz. Méd. de Liège* that he has cured one hundred and twenty cases of scarlet fever with turpentine, both children and adults, who were out of doors before three weeks, and none showed traces of albumen in the urine. Several malignant cases, ataxic, were cured by two hypodermic injections of one gramme of essence of turpentine.—*Therapist*.

DR. BRINTON, the archeologist, says that in North and South America no fewer than 120 or 130 absolutely distinct languages exist.

Translations.

PARISIAN MEDICAL CHITCHAT.

BY T. C. M.

Charity and Social Solidarity—Zola's Idea of Public Charity—Prince Bismarck's Painful Joints—Pirogoff's Erroneous Prognosis—The Chinese Method of Predicting the Sex of the Child in Utero—Failure of Koch's Tuberculin—As to the Tuberculation of Milch Cows and Beef Cattle.

Zola, in his new novel, "Paris," puts into the mouth of one of his heroes this opinion of alms-giving and charity:

"He ceased to believe in the efficacy of alms-giving; to be charitable was not sufficient, it was necessary from thenceforth to be just. Before all things to be just, and frightful misery would disappear without there being any need of charity. Certain it is there were many good hearts in suffering Paris; works of charity multiplied there like the green leaflets at the first balmy breath of springtime. There were charities for all ages, for all dangers, for every class of the unfortunate. They assisted the new-born children and looked after mothers; then came the foundling asylum orphanages, lavishly supplied for all classes. As for the adult, man was followed up in all the walks of life; he was cared for especially when aged—there were asylums, hospitals, refuges. On every hand help was extended to the abandoned, the disinherited, even to the criminals. There were all manner of leagues to protect the weak, societies to prevent crime, homes for those that repented. The propagation of benevolence, patronage, safe keeping, public assistance, charity unions,—it would take pages to enumerate the extraordinary vegetation of charities throughout Paris, in bountiful assemblage, where real goodness of soul is mixed with worldly vanity. What difference is it, besides, since charity purifies all? But what a terrible argument, the absolute uselessness, the derision of such charity!

After all these ages of so-called Christian charity not a social wound has been healed; human misery has only increased and been embittered up to the point of madness. The evil, aggravated without ceasing, would arrive at not being tolerated a day longer from the moment social injustice was cured. Is it sufficient for an old man dying of cold and hunger to be warmed by a society built upon alms-giving?"

Zola is ever truthful. He may be accused of demagogy; he may make mistakes, as who does not? But in a world where the rich are ever growing richer and the poor growing poorer, those who study well know that poverty is the result of injustice, and would not exist were it not for the selfishness of mankind against its brother men. For the strong to crowd down and crush the weak, through the means of such a base metal as gold, is a sorry reflection on humanity. In days of old they worshiped a golden calf, a single standard yearling probably, but now the calf has been coined into dollars. Were gold to be found as plentiful as coal to-morrow there would be no need of public charities in a hundred years. Public charities are the natural result of accumulated wealth, that is almost always the result of some rank injustice to the masses of humanity. Socialism is marching down to the sea in France, Great Britain and Germany. When vast accumulations of wealth disappear there will no longer be pauperism nor any need of asylums.

From socialism to Bismarck is a long stride, but Bismarck is suffering at the present time with pains in the articulations of the lower extremities. It is not the first time the ex-Chancellor suffered from these twinges. At the commencement of his career, when he represented Prussia at the Court of St. Petersburg, a grave crisis of this kind made him tender his resignation. Now, on the vessel that carried him back to Prussia was the celebrated surgeon Pirogoff. Why not consult him in regard to his legs? Bismarck sought Pirogoff. The surgeon examined the statesman and declared that Bismarck's right leg must be amputated.

"Above or below the knee?" asked Bismarck.

Pirogoff put his finger on the thigh and imitated the motion of sawing off.

"Never!" exclaimed Bismarck; "below the knee I might consent, but amputation of the thigh—rather death!"

Bismarck is not dead yet, despite the celebrated Pirogoff's prognosis. Supposing his thigh had been amputated? It was fifty years before antisepsis, too.

The recent alleged discoveries of Dr. Schenck have awakened renewed interest in matters embryonic. Since the days of Hippocrates attempts have been made to infallibly predict the sex of a child before its birth. Yet all such methods have been fallible up to the present time. According to Dr. Matignon, Chinese doctors distinguish certain symptoms, that even enjoy credit among the Europeans living at Peking. A very round belly, so prominent that it shakes when the woman moves, indicates a girl baby, while when the uterus extends high up it indicates a boy. Thus already, *in utero*, the position of the female is lower than that of the male. Nature at least is not over-polite.

A very fresh complexion, with a less marked pigmentation of the areola and less change in the features during pregnancy, to the Chinese medical mind indicates a girl baby; the contrary indicates a male child. Violent movements of the extremities of the fetus indicate a very young lady, as the feminine sex commences to kick against everything very early.

The Chinese prophesy sex on an arithmetical plan, too. If the second figure of the mother's age and the figure of the probable month of conception are alike, either equal or unequal, the baby will be a male, and the reverse a female.

Persistent headaches during pregnancy, according to the Chinese, always indicate a boy. Women subject to headaches during their lives have no headaches in pregnancy that ends in female births.

The investigations into the new tuberculin of Koch pursued of late in

Germany still more weaken the unfavorable results given in the first trials of the nostrum. Some think that the manufacturers have not yet perfectly succeeded in obtaining a product of uniform value. It is only in lupus that the best effects have been observed. As for pulmonary phthisis, medical opinion is now widely divided. While men of the laboratory and but little practical experience are enthusiastic, many men of large experience condemn its use in an absolute manner. New observations are necessary. The *Deutsche medicinische Wochenschrift*, in terminating a series of articles that it has published on this subject, declares that it will take many years to find out whether there is really any value in the Koch treatment.

The amusing farce of the application of the Koch serum by veterinarians to cattle is the last sanitary fad in the past four years. In Australia, where cattle for meat food was experimented on, the results, it is claimed, were so uncertain that the thing was discontinued among cattle intended for shipment to Great Britain. It is a question of taste whether one will ever drink the milk from a milch cow that has once been tuberculized by either the Danish, German or French serums.

The invention of Koch's lymph, in 1890, originated the idea of using the same as a test for so-called tuberculous cattle. Koch, in 1890, claimed that the injection of his prepared matter into any of the bovine species would produce a notable rise in temperature in a few hours provided such cattle were tuberculous, while no effect was produced in animals that were unaffected by the disease. Of course, this claim of Koch's interested cattle breeders, and the result was that there were a number of experiments made. The idea was that the disease was contagious, a thing that has never yet been proved in a court of justice, where the sworn testimony of doctors of experience might be produced, the majority of whom would probably testify that, as a matter of personal experience, consumption is not contagious, or so slightly so as to hardly be noticeable.

In 1891, one Guttman, of Dorpat,

first published his account of how far Koch's statements held good as regards the cattle test, *i.e.*, Koch's tuberculin. There are many medical men who place but little reliance on the conclusions of bacteriologists as applied to the practice of medicine, so when it was found that animals heretofore apparently healthy had an elevation of temperature in from nine to twelve hours after the injection of the lymph, and that this was a proof that they were tuberculous and their milk and flesh unfit for human food, the practical breeder and farmer objected to these tests for the following reasons:

1. That the test itself was most uncertain, since cows that were far gone with tuberculosis, yet apparently healthy, do not show the reaction claimed.

2. That the State makes no preparation to pay for the live stock destroyed by the experimenter, since the only absolute proof that the animal is tuberculous, after all, is a post-mortem, that requires much anatomical and microscopical knowledge.

3. That the application of such tests created a popular prejudice in the minds of the over-credulous and timid public that would tend to destroy the sale of milk, butter, cheese or meat from any herd claimed to be infected by men whose dictum is not regarded with any especial degree of credence by the more practical portion of the general body of the medical profession.

4. That no set of law-givers ever conferred on departments of health, without the previous sanction of a board of expert sanitarians, the right to make experimental stations out of sanitary departments; that cattle are vested property rights, and cannot be destroyed or impaired without their owner being entitled to a hearing in full accordance with legal rules; that no sanitary officer has a right to exercise powers unless duly clothed with authority to act within the jurisdiction of courts. The dairyman and cattle breeder has a right to forbid any sanitary experiments to be made in his herds unless by the consent of the owner, and if the people choose to refuse to purchase milk or meat derived

from so-called tuberculized herds, in the absence of proof that such milk or meat is not more dangerous than before the sanitary experimentation, the loss of trade shall fall on the dairyman and breeder and not on the state.

The experiments so far used on cattle have only been satisfactory to the veterinarians employed and stock dealers who favor the State paying for broken-down cattle, that under other circumstances would go to fertilizer companies. Owing to the extreme variations in the temperature of cows, fright or even slight illness causing their temperature to vary from one to two degrees, the preliminary stage of the tuberculation of the bovine tribe affords rather uncertain evidence on which to base conclusions. Nocard's experiments, in 1892, showed that a reaction of two and a half degrees could not be accepted as a positive proof of tuberculosis. Neither Paris, London nor Vienna depend on tuberculized milch cows for their milk-supply.

If a strong feeling has been developed during late years even against vaccination, the attempt to experiment on milk and meat supplies in the interest of sero-therapy, by pseudo-scientists as ignorant as they are inexperienced, will only tend to still further widen the breach between the public, that resents overmuch sanitary interference, especially that of a purely experimental nature, and self-constituted authorities acting outside the pale of the law in utter disregard of personal and property rights. But of this more anon.

The Significance of Chlorides in Anemia.

W. Von. Moraizewski (*Virchow's Archiv*, 1896) writes: During anemia there is a diminution in the excretion of chlorides in the urine; the excretion increases as the patient improves in health. Calcium phosphate behaves like the chlorides; the alkali phosphates and uric acid are increased in amount in the urine in the anemic period, this increase lessening with convalescence. An addition of calcium phosphate and sodium chloride to iron salts increases their blood-forming action.—*Therapist*.

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ANÆMIA, CHLOROSIS, RICKETS, AMENORRHŒA, Etc.,
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Phosphorus is a stimulating nerve tonic, and in suitable cases a true tissue food in every issue of the word.

Specify Warner & Co.'s for Full Therapeutic Effect.

Pil: Phosphori, 1-100 gr., 1-50 gr. or 1-25 gr.

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DOSE.—One pill, two or three times a day, at meals.

THERAPEUTICS.—When deemed expedient to prescribe phosphorus alone, these pills will constitute a convenient and safe method of administering it.

Pil: Phosphori cum Nuc. Vom.

(W. R. WARNER & Co.)

℞ Phosphori 1-50 gr.
Ext. Nucis Vomicae ¼ gr.

DOSE.—One or two pills, three times a day, at meals.

THERAPEUTICS.—This pill is especially applicable in ATONIC DYSPEPSIA, depression, and in exhaustion from overwork, or fatigue of the mind. PHOSPHORUS and NUX VOMICA are SEXUAL STIMULANTS, but their use requires circumspection as to the dose which should be given. As a general rule, they should not be continued for more than two or three weeks at a time, one or two pills being taken three times a day.

Pil: Phosphori cum Ferri et Nuc. Vom.

(W. R. WARNER & Co.)

℞ Phosphori 1-100 gr.
Ferri Carb. 1 gr.
Ext. Nucis Vomicae ¼ gr.

DOSE.—One or two pills may be taken two or three times a day, at meals.

THERAPEUTICS.—This pill is applicable to conditions referred to in the previous paragraphs, as well as to anemic conditions generally, to sexual weakness, neuralgia in dissipated patients, etc.

Pil: Phosphori cum Ferro et Quinia.

(W. R. WARNER & Co.)

℞ Phosphori 1-100 gr.
Ferri Carb. 1 gr.
Quiniaz Sulph 1 gr.

DOSE.—One pill, to be taken three times a day, at meals.

THERAPEUTICS.—The PHOSPHORUS increases the tonic action of the iron and quinine, in addition to its specific action on the nervous system. In general debility, cerebral anemia and spinal irritation, this combination is especially indicated.

Pil: Phosphori cum Ferro et Quinia et Nuc. Vom.

(W. R. WARNER & Co.)

℞ Phosphori 1-100 gr.
Ferri Carb. 1 gr.
Ext. Nucis Vomicae ¼ gr.
Quiniaz Sulph. 1 gr.

DOSE.—One pill, to be taken three times a day, at meals.

THERAPEUTICS.—The therapeutic action of this combination of tonics, augmented by the specific effect of Phosphorus on the nervous system, may readily be appreciated.

Pil: Phosphori cum Quinia et Digital. Co.

(W. R. WARNER & Co.)

℞ Phosphori 1-50 gr.
Quiniaz Sulph. ¼ gr.
Pulv. Digitalis ¼ gr.
Pulv. Opii ⅛ gr.
Pulv. Ipecac. ⅛ gr.

DOSE.—One or two pills may be taken three or four times daily, at meals.

THERAPEUTICS.—This combination is prescribed in cases of consumption, accompanied daily with periodical febrile symptoms, quinine and digitalis exerting a specific action in reducing animal heat. Patients should, however, be cautioned as to the use of Digitalis, except under the advice of a physician.

Pil: Phosphori cum Digital. Co.

(W. R. WARNER & Co.)

℞ Phosphori 1-50 gr.
Pulv. Digitalis 1 gr.
Ext. Hyoscyami 1 gr.

DOSE.—One pill may be taken three or four times in twenty-four hours.

THERAPEUTICS.—The effect of digitalis as a cardiac tonic renders it particularly applicable, in combination with phosphorus, in cases of overwork, attended with derangement of the heart's action. In excessive irritability of the nervous system, in palpitation of the heart, valvular disease, aneurism, etc., it may be employed beneficially, while the diuretic action of digitalis renders it applicable to various forms of dropsy. The same caution in regard to the use of digitalis may be repeated here.

WILLIAM R. WARNER & COMPANY,

Manufacturing Chemists,

PHILADELPHIA.

NEW YORK.

CHICAGO.

THE
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Whole Volume LXXIX.

Original Articles.

**ANEURISM OF ARCH OF THE
AORTA TREATED BY THE
SIMULTANEOUS DELIGATION
OF THE RIGHT COMMON
CAROTID AND SUB-
CLAVIAN ARTERIES.¹**

BY R. C. HILL, M.D.,
CINCINNATI.

¹ This patient was seen by me for the first time in October of last year, when he presented himself for the relief of very severe pain in the chest, arm and neck. His age is fifty years. He is a native of Ireland and has been in the United States thirty-three years. He is a policeman. His family history is excellent. His personal history contains nothing of interest except an account of a suspicious sore upon the genitals, contracted twenty years ago. He has had no treatment of a specific character since that time, and has never suffered from any secondary manifestations of syphilis. Six years ago he contracted typhoid fever, which seems to have been of a rather severe type, but from which, however, he entirely recovered after a somewhat protracted convalescence.

The history of his present suffering dates back nearly a year, although it acquired its present severe character only within the past four months. At the time he presented himself his pain had grown so intense that he was unable to sleep except fitfully, and always sitting up in an arm-chair. During the

day his pain was unabated, and was particularly distressing if the nature of his duties obliged him to put forth any unwonted physical effort. After occasions of this kind he would be compelled to solicit relief from his sufferings at some drug-store along his beat, though, to his credit, it must be stated that he never acquired any drug habit during this time.

When I first saw the patient his physical condition was as follows: Weight, 155 pounds, a loss of from twenty to thirty-five pounds from his normal weight. His face was drawn and anxious, and all his movements were made with care and accompanied by bitter complaint. His inguinal glands were somewhat enlarged, but other glands not noticeably so. No evidence of organic spinal disease was to be detected; his co-ordination was perfect, and paretic and anesthetic manifestations were absent. His abdominal viscera revealed nothing abnormal; his lungs were normal, but his heart was rapid and irritable, easily excited by the slightest muscular exertion, and somewhat arrhythmical in its action; the apex was displaced considerably toward the right, but no adventitious sounds were detectable at this time. His pulse was hard, but his urine was normal as to quantity, reaction and composition.

Although the patient had been under treatment almost continuously during many weeks for suspected syphilitic neuritis, I determined to satisfy myself whether or not a full course of anti-syphilitic medication would mitigate his suffering. With this object in view, I placed him upon iodide of potash, which I was able rapidly to push until he was taking one thousand grains per diem, while the simultaneous hypo-

¹ Read before the Academy of Medicine of Cincinnati, January 31, 1898.

dermic administration of bichloride of mercury was pushed until mild ptyalism resulted, without, however, in any manner affording the patient relief. Early in November I was enabled to detect a bruit in the interscapular region, and shortly afterward in the second right intercostal space. The patient was now put to bed upon restricted diet and tincture of aconite given in drop doses every hour until the pulse dropped to 60, increasing or diminishing as occasion demanded. This line of treatment was steadily pursued for ten weeks, and for a time promised to afford the patient much relief, but slowly yet steadily visible pulsation appeared to the right of the sternum, which gradually extended over two or three intercostal spaces and produced an easily noticeable protrusion in this locality; while cough now appeared and the heart became intolerant of restraint, and could with difficulty be kept below 75 beats per minute; indeed, upon one occasion near the close of this treatment the patient, upon his own responsibility during my absence, increased the dose of the tincture aconite to twenty-five drops in his anxiety to reduce his pulse, which he had learned to count for himself, and repeated it every hour during an entire night, with the result that I was obliged to spend several hours the next morning in active attendance upon a pronounced case of aconite poisoning.

I hoped that this accident would not be without a good effect upon the subsequent fortunes of his disease, but he presently began to complain of considerable dysphagia not before present, while the protrusion formed by the tumor increased at a seemingly more rapid rate than before; thereupon he was removed to Christ's Hospital, where two weeks ago last Saturday I ligated his right common carotid and subclavian arteries, using for this purpose broad ligatures of kangaroo tendon. The wounds healed by first intention, all the dressings being discarded ten days later.

Following the operation his pulse became very rapid (140) and very weak, and much bronchial secretion

was poured out for a few days, which appeared to depend upon several causes, the chief of which were probably the anesthetic, which was chloroform first and ether during the latter part of the administration, and the venous congestion dependent upon the obstruction upon the arterial side of the circulation; but another factor which contributed to the persistence of this condition was a certain diminished sensibility within the larynx, which permitted liquids to enter the trachea without the knowledge of the patient. This lowered sensation was experienced over the right side of the face and in the right arm, but no paresis seemed to be present in the muscles of these parts. His temperature after the operation fell to 96.5° , and was frequently below normal during the next two weeks; it never rose above 99° .

No appreciable effect was produced upon the aneurism for five days following the operation, when it was noticed that the bruit appeared fainter, and after this time consolidation went on gradually until two weeks after the operation no visible pulsation was to be made out, and the site of the former prominence upon the chest wall was now occupied by a well-marked depression, which may be readily seen on comparing the two sides. His dysphagia is now almost entirely relieved, and his pain is so much less that he now sleeps many hours with comfort, and indeed only occasionally has any pain at all.

The practice of ligating the carotid and subclavian arteries upon the right side for the cure of aneurism of the arch of the aorta owes its origin to a mistake in the diagnosis on the part of C. Heath, in 1865, when he tied these vessels for a supposed aneurism of the innominate. The patient was much improved, and lived several years afterward. After her death, however, it was found that the supposed innominate aneurism was really one of the arch of the aorta. Since that time the operation has been done, so far as I know, about nine times, two of whom died, while seven recovered. Of those who recovered from the operation, all

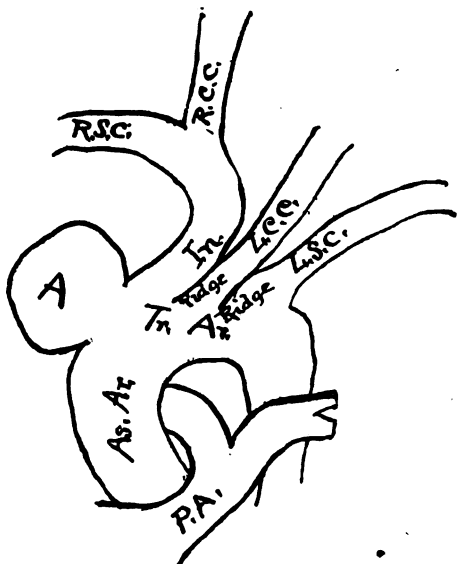
seem to have been much improved, and the subsequent duration of life ranged from ten months to four years.

The principle which underlies the good results of this operation in proper cases is not very clear. Ever since the time of Hunter it has been well understood that to secure consolidation of an aneurismal tumor it was unnecessary to entirely prevent the entrance of blood into it. Indeed, the success of Wardrop's operation makes it very evident that much less obstruction of the blood circulating through an aneurism is sufficient to secure its consolidation than was formerly deemed to be necessary for this purpose; still, the comparatively slight obstruction to the circulation through an aortic aneurism which can be produced by the ligation of any of its large branches in the neck would never be considered *à priori* to be sufficient for its cure. Yet the fact remains that it is so in many instances certainly. Careful comparison of the manner in which the brachio-cephalic left carotid and subclavian arise from the arch in a considerable number of cases shows that, as a rule, these vessels arise in intimate relation one to the other, no interval being left, as is usually depicted in the cuts or described in the text of most works on anatomy. Further, the interior of the arch of the aorta has been described as presenting a series of ridges prolonged from the angle between contiguous vessels towards the aortic opening. This arrangement, in a certain sense, divides the interior of the aortic arch into a series of territories, from each of which a vessel opens, ligation of which influences to a greater extent the blood in the territory from which this vessel springs than that in other portions of the arch. A reference to the diagram may serve to explain this arrangement better than a verbal description could do.

Now it is claimed that in the operation of ligation of the right common carotid and subclavian arteries the influence is most strongly exerted in that segment of the aorta which corresponds to the prolongation of the innominate inward toward the heart. In view of this explanation it is not difficult to

imagine that the obstruction to the circulation in what I may term the innominate segment of the aorta may become sufficient to very materially retard the flow in a sacculated aneurism which communicates with this portion of the vessel.

Another explanation of the good effects of this operation attributes the benefit derived entirely to the rest in bed, and those who hold this view tell us that any operation of similar magni-



As. Ar. represents the ascending arch; *Tr. Ar.*, transverse arch; *A.*, aneurism; *In.*, innominate artery; *R. S. C.* and *R. C. C.*, right subclavian and common carotid arteries; *L. S. C.* and *L. C. C.*, left subclavian and common carotid arteries; *P. A.*, pulmonary artery.

tude would be followed by corresponding benefit. It is unnecessary to say that this is certainly not the explanation of the benefit following the operation in this case. This man had previously been confined in bed for ten consecutive weeks, not only without noticeable benefit, but with decided increase in the size of the aneurism.

As to how cures result from this operation, I would again mention the very depressed state of the circulation as not without influence probably in this case. After the vessels had been

tied the man's pulse ran up to 140 beats, and became exceedingly weak. It remained in this condition for nearly forty-eight hours, and, indeed, for several days was very rapid, although growing stronger as the heart became accustomed to the altered state of the vascular system and as the collateral circulation became established. However, if this fact exerted any influence upon the final result it certainly did not become evident for several days after the circulation had again returned to something like a normal state.

Caffeine in Heart Disease.

H. M. Tickell (*The Clinical Journal*, February 2, 1898) says that in cardiac dropsy digitalis is the most useful drug, but when it does not afford relief caffeine may be of valuable service. He gives an account of a patient whose heart was greatly enlarged, and the impulse strongly marked, the apex beat being in the seventh space in the anterior axillary line. There were signs also of dilatation of the aorta. At the apex was a loud and long systolic murmur replacing the first sound, and heard at the back. A soft systolic murmur was present in the aortic area, and subsequently a diastolic murmur was detected. Liver greatly enlarged, and extending down to within two inches of the umbilicus. Pulse 90 per minute, of "water-hammer" character. Râles were present at the posterior bases of the lungs. Specific gravity of urine 1024; cloud of albumen. Digitalis was without effect, strophanthus was even deleterious, but caffeine was remarkably successful.

The caffeine was used according to the following formula:

Caffeine,	gr. v
Sod. salicyl.,	gr. iv
Aq. ad.,	℥j
Bis die.	

—*Medicine.*

THE plague continues to increase in Bombay. Statistics show the great value of preventive treatment through inoculation, the stronger lymph being more successful.—*Med. Times.*

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of January 31, 1898.

The President, W. E. KIELY, M.D.,
in the Chair.

W. EDWARDS SCHENCK, M.D., Secretary.

TELEPHONE 1981.

The evening was devoted to exhibition of patients, specimens and case reports, with discussion.

DR. R. C. HILL reported a case of aneurism of the arch of the aorta treated by the simultaneous deligation of the right common carotid and subclavian arteries (see p. 285).

Para-myoclonus Multiplex ; Recovery.

DR. F. W. LANGDON exhibited a patient who had been before the Academy two years previously, presenting a typical syndrome of para-myoclonus multiplex. At that time a favorable prognosis had been made, which has been verified by the subsequent course of the case. The patient stated that he had had no myoclonic or other spasms for a year past, and had gained twenty-five pounds in weight. He ascribes his recovery to his return to hard manual labor.

Ulcer of the Stomach—Specimen.

DR. JOSEPH EICHBERG: This specimen is from a case that gave the history of having suffered with intense pain in the abdomen, with paroxysms of vomiting, during the past ten years. Examination of the test-breakfast revealed it to be acid, containing a coffee-ground substance, which was found to be blood. While in the house she complained of a good deal of pain all over the abdomen, with a little vomiting. The evening after the test-breakfast she had an attack of intense pain, which required an opiate to relieve her. The next morning when I came she was in collapse. I made a diagnosis of perforating ulcer

of the stomach. She died that noon, three days after admission.

At the autopsy, next morning, a round perforating ulcer was found in the stomach, and near it was a new cicatrix.

This second specimen is a

Ruptured Tubal Pregnancy.

The patient is aged forty-two years, the mother of three children. She menstruated regularly previous to January, and upon the 8th of that month there appeared a menstruation that never ceased. Last week she was seized with an intense pain in the abdomen, that passed away in ten minutes, and as she was feeling quite well she went to the theatre that same evening, and while there had another such attack. I saw her the next morning. There were no symptoms, no pain or temperature. I ordered some calomel and advised that she stay in bed. A few days later she again had this pain. I found the abdomen slightly distended, and vaginal examination revealed the pouch of Douglas full. I diagnosed ruptured tubal pregnancy and advised an operation, to which they consented. Dr. Hall made the operation, and found a right ruptured tube and removed a couple of handfuls of clotted blood from the abdomen.

DR. RUFUS B. HALL reported two cases and showed specimens.

I.—Intra-Ligamentous Cyst.

Mrs. W., aged forty-three, referred by Dr. Miles, of this city, suffering from a large abdominal tumor. It was diagnosed as an ovarian cyst. She was admitted to my private hospital on January 24, and operated upon the 26th. The specimen here presented was removed. It proved to be an intra-ligamentous cyst, and for that reason I have decided to bring it before the Academy as illustrating a point I emphasized in the report of cases presented to the Academy in October and December last. You will recall that the improved technique I proposed for dealing with intra-ligamentous cyst was this: Cut off the blood-supply to the tumor. First ligate the ovarian artery on the tumor

side at the pelvic border, then the ovarian artery on the healthy side, dividing the peritoneum above the top of the bladder, pushing the bladder down. Next ligate the uterine artery on the healthy side, cutting across the cervix and ligating the uterine artery on the tumor side before commencing enucleation of the tumor itself. I said at that time this was an operation of election in all cases in which the tumor descended far down into the pelvis and was firmly adherent. I have met in my past experience sessile tumors that did not dip far down into the pelvis. This class of tumors are not so intimately attached to the pelvic floor, and can be quickly and safely dealt with by the old method. A hysterectomy should not be made in these cases. In this case I did not make a hysterectomy. I tied the ovarian artery at the pelvic border and again at the uterine side of the tumor, divided the capsule above the top of the bladder and a suitable distance behind and readily enucleated the tumor, taking up each bleeding point separately and ligating it. I closed the peritoneum over the pelvic floor with a running suture of cat-gut. The operation was easily and quickly done, and the patient lost but very little blood, not more than two ounces in the entire operation. She is now convalescent. I am glad this opportunity has arisen so quickly to present a specimen removed in this way. It answers a criticism that was urged against the new method of operation. It emphasizes my statement that I would only make a hysterectomy in those cases where it was for the patient's best interests.

II.—Tubo-Ovarian Cyst.

Mrs. C., aged twenty-eight, married five years, residence Wilmington, O., referred by Dr. G. W. Wire. She has suffered from some uterine trouble for several years, and has been growing worse rapidly in the last three or four months. She entered my private hospital on January 27, and was operated this morning, January 31, and the specimen here presented removed. The specimen consists of a tubo-ovarian cyst holding about two pints, a suppurating

ovary holding about a pint of very offensive, thick yellow pus, and the entire uterus. When the patient entered the hospital examination revealed the pelvis almost entirely filled by a fixed firm mass, the uterus in front and resting against the pubic arch. To the patient's right, above the pelvic mass and resting on it, could be outlined a cystic growth extending above the anterior superior spine of the ilium; it was also fixed. Upon opening the abdomen the cyst was exposed. A space as large as the hand, on the anterior surface, was not adherent; every other portion of the cyst was adherent. It was tapped and emptied. The ovarian artery was tied at the pelvic border, clamped on the side next the uterus and the cyst enucleated. The suppurating ovary was densely adherent to everything with which it came in contact. It was impossible to remove it without rupture, and the field of operation was contaminated. As both ovaries were necessarily lost and it was necessary to do so much damage to the surrounding parts, I decided to do a total extirpation of the uterus to better prevent hemorrhage, and to make free drainage by the vagina.

If you will observe, the tubo-ovarian cyst is a beautiful specimen of its kind. The tube is elongated to more than seven inches, is distended to the size of the index finger, and opens free into the cyst-cavity. I have passed a male sound through the cyst into the tube, as you will observe as I pass the specimen to you. The fluid in this cyst was dark colored, and had no indication of supuration. The uterus is attached to this cyst. On the other plate is the suppurating ovary with a quantity of the pus which it contained. You will note how offensive the pus is. The operation was an exceedingly tedious and difficult one, but I hope and believe the patient will recover. I present the specimens while fresh. These cases are the most difficult encountered in abdominal surgery.

Congenital Absence of Gall-Bladder.

DR. OTIS L. CAMERON: Dr. Wm. Knight requested me to exhibit this specimen of congenital absence of the

gall-bladder. In the duct is a calculus the size of a pigeon's egg.

Appendicitis at Age of Seventy-two—Specimen.

This specimen was obtained from an old man, aged seventy-two years, who came into the St. Mary's Hospital at 5 P. M. one evening and died the next morning.

Autopsy: An old appendicitis, the appendix three inches long, perforated at tip, containing a stone about the size of a marble.

Carcinoma of Liver and Omentum—Specimens.

From Dr. Buttemiller's case. She was an extremely large woman, who was embalmed. There was carcinomatous infiltration of the omentum and liver, with thickening of the latter, and gall-stones.

Primary Cancer of Gall-Bladder; Extension to Omentum; Large Gall-Stone; Innumerable Small Calculi.

DR. J. C. BUTTEMILLER: I had the opportunity of seeing this case but twice before death occurred. The patient was an old lady, sixty-seven years of age, a market woman by occupation, having attended to her market affairs regularly until about a week prior to the fatal issue of her illness, excepting at such intervals as these attacks (which I shall presently describe) occurred. She weighed three hundred pounds, had an enormously large abdomen, was the mother of six children, all living. The eldest daughter had been operated upon for gall-stones by Dr. Rufus B. Hall a few years ago. These attacks extended over a period of eighteen months, occurring periodically every four or six weeks, lasting from one to three days at a time. I was called to attend this woman for the first time on the 21st of last December. Found her suffering with severe pain located in the hypogastric region, slight jaundice, persistent vomiting, no history of chill or fever, the temperature being normal. Inspection and palpation revealed nothing, as her enormously large abdomen precluded the possibility of outlining any growth the size of this

specimen. Diagnosticated obstruction of ductus communis choledochus, probably catarrhal in nature. Gave morphine hypodermatically to relieve pain, bismuth and effervescent drinks to allay vomiting. These symptoms subsided in about twelve hours, when I was informed that patient had recovered from her attack, and that it was deemed unnecessary to extend my visits, which prevented any further inquiry into nature of these attacks, she having had so many of like nature that she attached no significance to them. About five days later I was again hastily summoned to attend her, and found her with the same train of symptoms as before, but in conjunction therewith there was labored breathing, cyanosis of face and lips, heart sound almost inaudible, pulse rapid and thread-like, her general appearance indicating approaching dissolution. Although she had voided her urine but an hour prior to my arrival, she was so persistent in the belief that the pain in the hypogastric region proceeded from a distended bladder that she prevailed upon me to catheterize her, obtaining only about an ounce of urine, apparently normal in appearance. Palpation over right hypochondriac, epigastric and right lumbar regions elicited no sign of pain, complaining only of slight soreness, which was attributed to her efforts of vomiting. Gave nitroglycerine hypodermatically. Patient died about two hours after inception of this attack. After obtaining consent to a post-mortem examination I was summoned to attend a case of labor, but Dr. Otis L. Cameron kindly made the examination for me, and has presented the specimen to you this evening. This case was of especial interest to me, on account of the pain being referred to a region so remote from the site of the original trouble, which so frequently pertains in these cases.

Cystic Floating Kidney.

DR. EDWIN RICKETTS: This specimen is from a married woman, aged twenty-eight years, the mother of three children. She noticed previous to the birth of the last child a lump in the left side, that would ascend when she would

lie down, to descend again when she would become erect. My diagnosis was a floating kidney. Last Tuesday the abdomen was opened and we found that the kidney could be shoved down, and further examination revealed that it contained a cyst; under the circumstances it was removed. After returning her to bed there was a secondary hemorrhage, but there were no efforts made to reopen the abdomen, and after draining it ceased. Dr. Kramer will tell us about the microscopic examination.

DR. KRAMER: While multilocular cysts are common, I don't remember ever seeing an unilocular cyst of the kidney. This one resembles the cyst as it occurs in the ovary. If you will inspect the cyst you will see a polypoid growth on one of its walls. Section shows it to be an epithelial polyp, while that surrounding it is kidney tissue. The secretion from these cells produced the cyst.

DR. RICKETTS: I had hoped that some one would have suggested amputation of the cyst. The reason why this was not done was that it was a floating kidney, and, with due respect to Dr. Kramer's report, I thought it was cancerous, and am still of the opinion that this papillomatous growth, to say the least, is suspicious.

Blood-Test for Diabetes.

DR. S. P. KRAMER: Under the microscopes is a specimen of normal blood which is stained blue, and in contrast is the blood from a diabetic case that has a greenish-yellow color. Both of these specimens were treated with a 1 per cent. methyl-blue solution. This is Dr. Bremer's method, who has used it for two years, and reports that this reaction occurs even after the disappearance of glycosuria. The explanation of the reaction is missing, but it is well known that sugar has the property of reducing methyl-blue. An important fact with this test is that the reaction occurs in individuals when other evidence of sugar has disappeared, so that the reaction is probably in the plasma. This reaction will also occur in dietetic glycosuria, so they should abstain from a sugary diet preceding the test.

DISCUSSION.

DR. G. E. MALSBARY: The specimens just exhibited are quite beautiful. But diabetes is not the only condition in which the test is positive. This may be gathered from what the reporter stated when he referred to finding the reaction in cases of dietetic glycosuria. Nor is the test positive in diabetes only while there is sugar present in the urine. Bremer speaks of finding the reaction in cases of diabetes after the disappearance of sugar. I have tried to verify the test, and in several instances have obtained a slight reaction by the method described this evening, but in the majority of cases the reaction was not sufficiently marked to justify a diagnosis. At the present time Bremer makes the test macroscopically, with congo red, which method he recommends to the general practitioner on account of its greater simplicity. The way he makes the examination is as follows: Specimens of suspected diabetic blood and control specimens of normal blood are spread in thick layers upon glass slides. The specimens are fixed by placing the slides for eight to ten minutes in an oven at 135° C. When cool the diabetic and control specimens, placed back to back, are immersed in a 1 per cent. aqueous solution of congo red for from two to five minutes, then washed with distilled water. The diabetic blood will not be stained (except faintly upon long exposure to the staining fluid), whereas the control specimen will show the usual red color. Should Biebrich scarlet be used instead of congo red, Bremer finds just the opposite effect, *i. e.*, that the diabetic blood is stained and the normal blood is free from color. A 1 per cent. solution of phloxin enables one to make the test in two or three seconds, but an exposure of a few seconds longer will color also the diabetic specimen. Some observers, Lépine and Lyonnet (*Lyon Médicale*, June 7, 1896), claim to have secured the reaction in leucemic blood. Bremer holds that this is possible only when the eosin-methylene-blue compound is used, and the predominance of methylene-blue causes excessive alkalinity of the reagent. Such a reaction is not secured by the naked-

eye demonstration to which we have referred. It is Bremer's belief that the reaction depends upon some change of the hemaglobin of the erythrocytes in diabetic blood.

As I said, the microscopic specimens just presented are very beautiful, but the method described by the reporter does not seem as valuable to the general practitioner as the naked-eye demonstration now recommended by Bremer.

Nephritis—Micro-Specimens.

DR. J. E. GREIWE: Under the microscopes are several specimens showing an acute interstitial and chronic parenchymatous nephritis. There is a round-cell infiltration around the glomeruli, with retraction from them and evidence of a typical peri-glomerulitis, such as may be found in that form of nephritis which follows scarlet fever. This peri-glomerulitis is of a chronic form, showing marked thickening of the capsule.

Sarcoma of Testicle—Specimen.

DR. J. C. OLIVER exhibited a specimen of sarcoma of the testicle removed from a child seventeen months of age. The parents noticed an enlargement when the child was seven months of age. This continued to increase slowly until when it was removed it was about the size of a goose-egg. The tumor seemed to be thoroughly encapsulated, and I was careful to cut wide of the tumor. The child's general condition is good except that it has bronchitis. The other testicle is normal. I present the report of the case simply because of the fact that it was noticed so early in life.

Pyosalpinx.

DR. C. L. BONIFIELD: This specimen, a uterus with attached appendages, was removed at the Good Samaritan Hospital last Friday in the presence of the students. The patient was eighteen years old, and gave the following history:

She began menstruating at fourteen, and did so regularly until last November, when just before her period she was taken sick with a "bad cold." Menstruation did not appear, nor has it

since. Her illness grew worse, and a pelvic peritonitis developed. She was confined to her bed six weeks. When she got up a hard mass was noticed in the right inguinal region.

On entering the hospital this mass was still there, nearly twice the size of an orange. At the operation it proved to be a tube distended with pus, a knuckle of intestine, and this thickened portion of omentum, which I deemed it wise to remove. The uterus was removed because the right appendage was so enlarged and so adherent to the uterus that it could not be removed without removing the latter also. You will notice that the cervix was included in the hysterectomy. When it is necessary to do a hysterectomy for pus-tubes I think it should always be complete. This gives the best possible drainage. The pelvis was filled with a long, narrow strip of iodoform gauze, placed in straight layers from side to side, that there may be no difficulty in removing it. This keeps the intestines out of the pelvis—the infected area. The lower end of the gauze was brought out through the vagina. About one-fourth of the gauze is removed every twenty-four hours until it is all out. This prevents clogging at the point where the gauze enters the vagina, and allows the cavity formed by it to be gradually obliterated. Patient is convalescing as nicely as though it had been a clean case.

In answer to the question about gonorrhea, I will say I could get no history nor see any evidence of it, though I neglected having the discharges examined for the cocci. Her hymen was not intact, nor did her vagina show evidence of frequent intercourse. I believe the vast majority of pus-tubes follow either gonorrhea or abortion or labor, but I am not prepared to say that a catarrhal salpingitis never develops into a purulent one.

Pernicious Anemia—Blood Specimen.

DR. W. E. SCHENCK: The specimen under the microscope is from a case suffering from an anemia in which the examination of the blood made the diagnosis. The blood examination was as follows:

Red corpuscles.....	1,200,000
White corpuscles.....	4,000
Hemoglobin (Fleischl), 35 per cent.	
Color index, 1.45.	

DIFFERENTIAL COUNT OF WHITE CELLS.

Polymorphonuclear	
neutrophils.....	33.8
Large mono-nuclear.	1.8
Transitional.....	2.6—(adult cells)
Eosinophiles (old cells).....	1.8
Myelocytes.....	.6
Small mononuclear (young cells).....	59.0

QUALITATIVE CHANGES.

Red Corpuscles.—Diameter: Average increased; shape, deformities.

Many of the red cells showed a clear centre as if it contained a large vacuole, others were polychromatophilic.

White Corpuscles.—The great per cent. of small mononuclear (lymphocytes) present, the small per cent. of adult cells, which were dwarfed in size, very few of normal diameter.

PROGNOSTIC TABLE (CABOT).

Severe (rapidly fatal). Less severe (slower course).

Extreme progressive anemia. Remissions.

High color index. Normal (1.00) or low color index.

Increase in size of red cells. Normal-sized red cells.

Degenerative changes. No degenerative changes.

Numerous megaloblasts. Few megaloblasts.

Few or no normoblasts. Numerous normoblasts.

Small mononuclear Normal per cent. of (lymphocytes) cells. adult cells.

The lines in italics indicate the condition as it exists in this case, and shows it to be between the two forms. Further blood examinations at later dates will inform us of the progress of the case.

A megaloblast is an abnormally large red cell whose protoplasm may stain from brownish to purplish. Its nucleus is very large, filling most of the cell, and differs from that of the normoblast in that it stains pale, often even, and outside of and surrounding the nucleus is a *narrow band of clear white*, probably an empty space between nucleus and protoplasm. It is of prognostic value in that the more numerous they are, as compared to the normoblasts, the graver the prognosis. This cell does not occur anywhere in the healthy body. Ehrlich assigns it to the fetal type, and that when it is present as indicative of the return of the blood to the fetal state.

A normoblast is the size and color of a normal red cell; its nucleus is circular, and stains darkly, in many cases almost black, and is about half the diameter of its cell. It usually is to one side of the centre of its cell, and in some instances you will see it as if it were escaping from the cell. Ehrlich claims that a new non-nucleated red cell is formed from this extruded nucleus. The normoblast is normally present in moderate numbers in the bone-marrow of healthy persons, and is considered as a younger stage of the normal red cell.

The appended table will enable us to differentiate the anemias:

suggestive of chlorosis. There was bleeding from the gums, which were not spongy. There was effusion in both pleural cavities. The pulse ranged from 84 to 90, fair in volume, low tension; there was a soft blowing cardiac murmur transmitted into the cervical vessels, which, in my opinion, was of hemic origin. The urine was normal in appearance; sp. gr., 1020; no albumen or sugar. There was no palsy, anesthesia, ataxia or other marked disturbance of the cranial or any other nerves; no evidence of impairment of the nerve centres. His grasp registered by the dynamometer was R. 110, L. 95, which

	Red Cells. Normal: Men, 5,000,000; Women, 4,500,000.	Size of Red Cells.	Nucleated Red Cells.		White Cells. Normal: 5,000 to 10,000.	Young Cells. Small, Large and Transitional Mononuclear, 20 to 30 per cent.	Adult Cells. Polymorpho-nuclear Neutrophils, 60 to 70 per cent.	Old Cells. Eosinophiles, ½ to 4 per cent.	Myelocytes, Normal Only in Bone Marrow.
			Normoblasts.	Megaloblasts.					
PRIMARY. Perniciousanemia	1,000,000	Increased	Less numerous than megaloblasts	Majority of nucleated exceeding normoblasts	4,200	45.9	Decreased	2.7	2.0
Chlorosis	Rarely under 2,000,000	Diminished	Few	.....	7,485	33.0	Decreased	3.5	Rare
SECONDARY. Leukemia:									
Splenic myelogenous	3,000,000	Normal	Numerous	Few	450,000	7.6	50.0	4.4	87.0
Lymphatic	3,000,000	Normal	Rare	.....	100,000	96.0	3.0	0.36	None to .7
Hodgkins' disease	Normal	Normal	None	None	7,500	Normal	Normal	.....	None
Tumors of or near the spleen	Diminished	Normal	Few	.....	20,000 to 40,000	Decreased	Increased	Usually increased	Few if any
Leucocytosis	.....	Normal	Few at times	.....	100,000 or more	Decreased	Increased	.....	Few if any
Chronic malaria.*	Diminished	Normal	Few	.....	Increased somewhat	Increased	Decreased	.....	Few if any
Amyloid disease	Diminished	Normal	Few	.....	Increased	Decreased	Increased	.....	None
* Hydronephrosis.	Normal	Normal	None	.....	Normal	Decreased Normal or decreased	Normal	.....	None

* Persistent examination will reveal the plasmodium.

Pernicious Anemia—Clinical Report.

DR. F. W. LANGDON: The patient from whom this specimen of blood was obtained is a vigorous-looking, well-proportioned man of about thirty-five years, weighing over two hundred pounds, of active business habits and no history of important preceding illness.

He presented a greenish-yellow complexion and ashy lips, commonly

had increased in ten days: R. 120, L. 100. The patient had been given strychnia and iron for some time by his attending physician without benefit. A change was made to arsenic and a formula devised by Austin Flint, Jr., in imitation of the normal blood salts combined with iron. Upon this treatment there seems to be a slight improvement in appearance and feelings of the patient, which a second blood examination does not confirm.

THE
Cincinnati Lancet-Clinic.


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DR. J. C. CULBERTSON,
317 W. SEVENTH ST., CINCINNATI, O.

CINCINNATI, MARCH 19, 1898.

Editorial.

THE POOR.

They are always with us, and are likely to continue unto the end of time. To care for them in a humanitarian way is often a very perplexing question. Sympathy is always given and frequently expressed in material methods. The human heart is generally easily touched in the presence of physical and mental suffering.

Because of the peculiar nature of the business of physicians they are continuously brought in contact with those who are afflicted, and it has been but natural that the members of this profession should get in the way of affording relief to an extent not dreamed of by those engaged in other occupations. From such conditions has grown the practice of giving professional service to the poor for little or no compensation. A physician, on call, will always prefer giving his own service without charge to a hunting up of some benevolent organization and asking that his services be compensated; besides, should he refuse, those who pay are apt to form an

unfavorable opinion of the charitable-mindedness of the doctor.

Hospitals have been built until a perfect craze has swept over the land. Visions of their necessity have become actualities so far as their creation has been concerned, and once erected patients for their beds must exemplify the predictions made of their necessity. To this end physicians are importuned to send their patients to the hospital for treatment.

Who ever thinks of aiding the poor in this manner who are in need of an attorney? Or of giving an equivalent order to a merchant, banker or manufacturer? Who ever heard of a banker accepting the note of a poor man for a sum equal to the value of a doctor's professional visit? And yet the banker is under precisely the same obligation to afford temporary relief that belongs to the shoulders of the physician.

Information comes to this office of action taken by township trustees throughout the State in reducing the ordinary allowance made to physicians for attention to the local poor. For such reductions no good and sufficient reasons are given beyond the desire to appropriate the funds for other purposes. For the actual poor let charity be extended, but at a uniform charge to the people, the doctor being called upon to contribute his full and fair share, but no more.

An evil of long standing is hard to remedy. Chronic diseases are slow to recover under the most approved treatment. So it is in this city, the hospital abuse is difficult to eradicate. Within the present week newspaper notices appear of police patrol-wagon service carrying into the hospital patients which should not go there. This is simply an infamous outrage upon the medical profession, which should not be tolerated.

Every physician in the city should provide himself with a package of postal-cards, and every time he observes such a newspaper item of this sort write a notice and mail it to the Mayor or Chief of Police. A hundred or two postals will arouse these gentlemen, who are well intentioned, to a condition which they do not appreciate. If there is a little bit of surplus indignation on the part of the doctor let him send an additional card to the Superintendent of the Hospital. Every time any physician sees a newspaper notice of a case going to the hospital, or hears of one through any other channel, no matter whether the case is in his locality or not, he should resort to this inexpensive way to curtail an abuse which affects him and his to a very great extent.

The hospital is for the pauper class, not for those who are able to earn a living, and physicians all over the land should enter upon a campaign of education, in which the people are to be taught that to go to a hospital—yes, any hospital—is a mark of poverty and pauperism upon the part of the one who goes there.

There are so-called pay-wards and so-called pay-hospitals, some of which have no reasonable excuse for an existence, and the individual who enters them does so to partake of pauper professional care, pauper attention, paupers' bread and a pauper's bed. What independent American citizen cares to be so classed? Sugar-coat the subject, and garnish with gilt-edged environments as you will, the pauper element clings to it. The odor and incense of sanctity becomes changed to a gangrene stench.

Missionary tours of hospital drummers should call upon their heads the anathemas and maledictions of every doctor who discovers one in his bailiwick. These perambulating blood-

suckers are vampires that will draw the doctor's last drop of blood and sacrilegiously whine about their acts being in the name of the holy One of Israel. To them it is a living business; so it is to the physician.

The practice of medicine is a business, and the sooner it is placed upon a business basis the better. Physicians are ever ready to do their entire share in caring for the indigent, even a little more, but this little should not be allowed to grow beyond rational dimensions.

MEDICAL SOCIETIES.

These organizations must exist, and just in proportion to their vitality is the strength of the medical profession in a given locality.

Word comes along on the wings of the wind that there exists an unusual delinquency of dues in some of the most efficient of the societies, which is no doubt chargeable in a great measure to abnormal financial conditions of members. It is reported that nearly 50 per cent. of the members of the Academy of Medicine of Cincinnati are in arrears. The dues are very small, easily within the reach of nearly every one, and should be paid. There is no known dissatisfaction with the management. The attendance is large and meetings always full of interest. A dull meeting is extremely rare. There is no financial embarrassment of the Academy as a society organization, but in the treasury is the life-giving principle.

The Ohio State Society roll indicates a condition of delinquency which should not exist. The membership should this year be doubled. All conditions of lethargic malaise should be cured, stimulants injected and toning tonics administered. The times call

for every man at his post. There is no particular crisis at hand, but because of this very fact there is all the more a need for every man. Science never sleeps; it goes right ahead, meeting and overcoming every obstacle that arises. Battle-ships, cruisers and gun-boats are to be created in greatest perfection in times of profound peace; so in medical work, the best of it is done in periods that are free from epidemic influences. Emergency quarantines are less effectual than those which are calmly thought out and prepared in periods of repose.

The county and State society should never sleep; their spirits should be abroad, perfecting professional knowledge. The standard of civilization is elevated through the potent influence of medical thought. This is powerfully illustrated in the lowered mortality-rates of the present century. Increasing knowledge pervades every department of thought and life; this will continue. Wars and earthquakes will not stop its diffusion. Working investigators never sleep or stop. To the multitude it is a question of keeping up with the procession. It is on the march. Society identification and dues are essential. The medical press is keeping tally, as it records the log of work done, and by whom. Is your name written there?

THE CINCINNATI HOSPITAL.

Does this institution need additional accommodations in the way of more room? Emphatically, no. New wards as proposed in a new building are uncalled for. If built, there would be a demand for patients, and where would the patients come from? Necessarily, from some struggling practitioner's practice. It is claimed the accommodations now in the hospital are not suitable

for patients suffering from diphtheria and scarlatina. It may be granted that such is the case, but it may also be claimed that this not because of a lack of ward room. The hospital is not half full, and two wards in that building can be perfectly isolated, floored with tile, marble or glass, the walls and ceiling tiled or covered with steel plates marbleized, and everything made as scientifically germ-proof as could be done in a new building. In fact, there is no device that could be put in a new building which cannot be placed in those wards, and the service would be much more convenient for all concerned.

* * *

In a neighboring city forcible vaccination was recently attempted by the Health Commissioner. He would not recognize a vaccination certificate from any physician. In consequence, trouble of a serious nature speedily ensued. A little brief authority seems to daze some men; the delirium of grandeur becomes manifest. Relief follows through a loss of head.

The medical profession as a body is constituted of thoughtful, educated men. The days when ignorance was tolerated have nearly passed away. For this reason a medical officer, whether of National, State or municipal position, needs to keep in close touch with medical men. Presumptions will not always go. Such officials who have the confidence of their profession can calculate upon thorough support at all times, and it will be given cheerfully.

The medical profession of Cincinnati is not petitioning for a new hospital building, and could be induced to entirely do without the one they now have. In fact, it would actually be to the interest of Cincinnati physicians to abandon the Cincinnati Hospital, closing up every ward, and give the rats and rooks

possession of the building. The honorable Board of Trustees may smile at the suggestion, and the staff give their "ha, ha" to the idea. Yet just all the same it is true. The medical profession would to-day be very much better off if there was no such institution. Would the poor suffer from lack of as good or better medical care? Certainly not.

The hospital idea has become a craze, and should be treated by drastic measures. The remedy: Educate the people in patriotism and ideas of individual independence. Instill these principles in the young, preach it to their seniors, and in time the work will be accomplished.

THE INDIANA STATE MEDICAL SOCIETY.

This organization will this year meet in Lafayette. Efforts are being put forth to make the occasion one long to be remembered. The citizens of the city are taking the matter of hospitality in hand, and with a generous liberality have schemed for a hospitable greeting to visiting physicians which cannot be excelled. This is well and creditable. It is an education and an honor to the people of any city to have gathered within its corporation limits the members of a State medical society. The State medical society rolls carry the names of the men who mainly constitute the cream of the medical profession. Every one knows that there are doctors and doctors, just as in members of every other calling.

In the State of Indiana there has long been an *esprit du corps* in connection with the State Society that is exceedingly enviable. The membership is remarkably large, and annual meetings are of great interest. The next one will not be an exception, for every nerve and cell of gray brain matter is

at a tension that will tell for the good of the ensuing meeting. A thousand members is a good large number for the Lafayette people to take care of, but the assurance has gone forth that the city will that week belong to its visitors, which speaks volumes to those who know even a little of the character of the people of Lafayette. Hence, there will be a going of even more than a thousand Hoosier doctors.

Whitcomb Riley is an honorary member in good standing in the Indiana State Medical Society, and faithfully attends the meetings. He will be in Lafayette at that time.

The Hon. Wm. Nye, who advised the members of the Indiana State Medical Society to take life easy, will not be there. His advice was not sought, but given gratuitously, an act of generosity not to be forgotten, and which should be recorded in the minutes. Perhaps this has been done; if not, it should receive favorable consideration.

EDITORIAL NOTES.

REPORT OF THE HEALTH DEPARTMENT OF CINCINNATI. — Following is the statement of infectious and contagious diseases for week ending March 11, 1898:

	Cases.	Deaths.
Measles.....	35	..
Diphtheria.....	5	..
Scarlet Fever.....	6	..
Typhoid Fever.....	6	1
Phthisis Pulmonalis.....	17	19
Membranous Croup.....	4	3
Pertussis.....	43	1
Varicella.....	4	..
Total.....	110	24

The mortality report for the week ending March 11, 1898, is as follows:

Croup (membranous).....	3
Typhoid Fever.....	1
Whooping-Cough.....	1
Other Zymotic Diseases.....	6-11
Cancer.....	2
Phthisis Pulmonalis.....	19
Other Constitutional Diseases....	7-18

Apoplexy.....	4
Bright's Disease.....	2
Bronchitis.....	6
Convulsions.....	4
Gastritis and Gastro-Enteritis.....	1
Heart Disease.....	7
Meningitis.....	9
Nephritis.....	4
Pneumonia.....	20
Other Local Diseases.....	19-76
Deaths from Developmental Diseases..	8
Deaths from Violence.....	4
Deaths from all causes.....	127
Annual rate per 1,000.....	16.30
Deaths under 1 year.....	18
Deaths from 1 to 5 years.....	14-32
Deaths during preceding week.....	107
Deaths corresponding week 1897.....	138
Deaths corresponding week 1896.....	126
Deaths corresponding week 1895.....	133

HEALTH REPORTS.—The following statistics concerning small-pox and yellow fever have been received in the office of the Supervising Surgeon General of the U. S. Marine Hospital Service during the week ending March 12, 1898:

SMALL-POX—UNITED STATES.

Cases, Deaths.

Alabama:	
Corona, Mar. 4.....	1 ..
Horse Creek Mine, Mar. 4.....	3 ..
Mobile, Mar. 4.....	1 ..
Patton, Feb. 1-Mar. 4.....	9 ..
Indiana:	
Evansville, Mar. 4.....	1 ..
New Jersey:	
Westfield, Mar. 4.....	1 ..
Tennessee:	
Chattanooga, Feb. 1-28.....	7 ..
Jellico, Feb. 1-28.....	8 ..
Johnson, Feb. 1-28.....	11 ..
Knoxville, Feb. 1-28.....	11 ..
Lenoir City, Feb. 1-28.....	3 ..
Mingo, Feb. 1-28.....	2 ..
Morristown, Feb. 1-28.....	1 ..
Newcomb, Feb. 1-28.....	3 ..
Rutledge, Feb. 1-28.....	1 ..
Texas:	
Brownsville, Feb. 12-26.....	2 ..

SMALL-POX—FOREIGN.

Bohemia:	
Prague, Feb. 6-12.....	3 ..
China:	
Hong Kong, Jan. 16-22.....	9 5
Cuba:	
Cienfuegos, Feb. 21-27.....	.. 12
Sagua la Grande, Feb. 20-26...	170 10
England:	
Liverpool, Feb. 13-19.....	1 ..
Mexico:	
Vera Cruz, Feb. 25-Mar. 3....	2 ..
Spain:	
Madrid, Feb. 10-16.....	.. 1

Russia:	
Odessa, Feb. 6-19.....	16 1
St. Petersburg, Jan. 30-Feb. 12.	34 3
Warsaw, Jan. 30-Feb. 12.....	.. 14

YELLOW FEVER.—FOREIGN.

Brazil:	
Para, Feb. 13-19.....	.. 8
Jamaica:	
Kingston, Feb. 15-28.....	2 1

ACADEMY OF MEDICINE.—March 12, 1898: "Some of the Sequelæ of Laparotomies," Dr. C. D. Palmer. The annual dues are now payable to Dr. M. A. Tate, Third and Broadway.

Obituary.

DR. WM. H. BUNKER.

The subject of this brief sketch, Dr. William H. Bunker, I have known for twenty-five years, and intimately for twenty years. After graduating from the Ohio Medical College in 1863, he received the appointment of Resident Physician to the City Hospital. At that time there were only two residents. Serving one year at the hospital, he then located in Carthage, where he soon became established in a very lucrative practice. It was after I went to Longview, in 1872, that I became acquainted with the Doctor. Soon after locating in Carthage he was appointed physician to both the City and County Infirmary. In 1874 he was elected Superintendent of Longview Asylum, and for three years we were associated together in caring for these unfortunates. It was here that I learned to know the man and appreciate his very many noble qualities. I believe I can truthfully say I have never known a more conscientious man. His whole time and energies were devoted to the care and well-being of the household. Unlike many superintendents, his whole time was spent with his patients, devoting little attention to outside matters. During those three years there was never an unkind word passed between officers and their families. We lived as one family. I believe I can truthfully say they were three of the happiest years of my life, notwithstanding the

fact that the surroundings were not always of the most desirable nature. Life among the insane presents very many rough corners.

In his dealings with his professional brothers he was the soul of honor, would rather lose a family than gain one by intrigue. He was a man of strong likes and dislikes, one of the few men you could depend upon as being a true friend in adversity as well as prosperity. His circle of friends was large, and yet he had very few intimate friends. In the sick-room he was gentle and kind in manner, ever holding out hope to the sick, even when he recognized the fact that there was little chance of recovery. He has often said to me that he believed one-half of the good physician's success depended upon gaining the confidence of the patient and inspiring hope. Although not an active church worker, he always had a strong abiding faith in something better beyond this life.

I know of no more befitting way of closing this than by the following beautiful lines: "Rest well, brother. Faithful, patient work like thine is garnered by the Great Divine. Not one atom can perish."

W. H. DEWITT.

Lymphatic Puerperal Sepsis.

When the day comes when we can feel sure, after the initial chill we will say, that the woman has that type of sepsis which is quickly disseminated throughout the system (the lymphatic variety), then early and radical extirpation of the pelvic organs, uterus, tubes, and ovaries, will give us a fair chance of saving these patients. — E. H. GRANDIN.

Guaiacol as a Local Anesthetic.

Newcomb (*Laryngoscope*), in a paper read before the American Laryngological Association, describes the use of this drug in certain cases as a substitute for cocaine. He says that it has been used in ninety-eight cases with gratifying success. It is prepared by adding 5 per cent. of guaiacol to a solution of sulphate of zinc in olive oil and alcohol.

Selections.

FROM CURRENT MEDICAL LITERATURE.

Heart Epilepsy and the Epilepsy of Arteriosclerosis.

The *Wiener medicinische Wochenschrift*, 1897, Nos. 33 and 35, contains the following contribution by F. Mahnert: Epilepsy may be divided into three kinds: (1) Idiopathic, in which there is no apparent cause for the attacks. (2) Reflex epilepsy, dependent on peripheral lesions, which subsides with their removal. (3) Epilepsy symptomatic of diseases or conditions. Under this is included the intoxication epilepsies from alcohol, carbon dioxide, lead, antipyrin, ergot, and auto-intoxication from the alimentary tract. Symptomatic epilepsy appears also in the infectious diseases, as syphilis, chorea, variola, measles, and sepsis; again in brain diseases (tumor, multiple sclerosis, embolic and hemorrhagic processes); also in injuries to the head, and as heart epilepsy in disease of the heart muscle or of the valves, as senile arteriosclerotic epilepsy in disease of the large and small blood-vessels. Heart epilepsy appears in young individuals chiefly as a result of valvular disease; in the elderly as a result of arteriosclerosis and subsequent changes in heart muscle. Only a few cases have been reported. The contributor adds three of his own. These three cases were of the arteriosclerotic variety and belonged either to presenility or physiological senility. Alcohol, syphilis and uric acid diathesis contributed to the senile arteriosclerosis. Arteriosclerosis of the larger vessels is nearly always present in varying degrees in old people. This condition becomes serious when the small blood-vessels are likewise affected. Circulatory disturbances in the brain arise. The cerebral anemia induced is evidenced by the slowing of the pulse, and by irritating the nerve centres may occasion epileptic attacks. Compression of the carotids may produce an epileptic convulsion. On the same principle arteriosclerosis, abetted

by a heart weakened by coronary artery disease, may induce cerebral anemia sufficient to cause epileptic convulsions. The pathological changes in arteriosclerosis of the cerebral vessels, as elsewhere, involve all the arterial coats and produce irritation of the associated ganglion cells, which contributes to the epileptic attack. The thickening and rigidity of the vessel wall further mechanically irritates the ganglion cells. This is especially true of the rigidity, since the shock of the pulse wave is transmitted to the surrounding nerve elements with unusual force. Senile arteriosclerosis occurs more frequently in men. Severe and mild attacks may alternate. The attacks are more likely to occur at night. Prognosis is unfavorable. Death may result during attack or in the course of time heart insufficiency will close the scene. Treatment must be directed to arresting the presenile arteriosclerosis and to preventing heart insufficiency.—*Medicine.*

New York Skin and Cancer Hospital.

At last the New York Skin and Cancer Hospital has a proper building, and there is in this country an institution worthy of the name. For fifteen years it has occupied a dwelling-house, 243 East Thirty-fourth Street, which was altered over, but on Saturday, March 5, the new hospital building, on Second Avenue, corner of Nineteenth Street, was opened with appropriate ceremonies, in the presence of a large number of representative people, who completely filled the large out-patient waiting-room.

After a few introductory remarks by the President, Mr. J. Cleveland Cady, Dr. A. Jacobi, President of the Medical Board, made an address, dwelling on the necessity and value of special hospitals, and the work of this, the only institution of the kind in the United States.

Dr. L. Duncan Bulkley then made an address, reviewing briefly the origin and early history of the hospital, and its work during the fifteen years of its existence. He called attention to the fact that the old City of New York had grown at the rate of 50,000 inhabitants a year for the past ten years, and sug-

gested that the hospital accommodations had not kept pace with the growth of the city. He mentioned that most of the special departments of medicine had special hospitals, but that until the establishment of the New York Skin and Cancer Hospital there had been none of the kind in this city or country. He instanced the large provision made for skin diseases in Paris, Vienna, Berlin, and all the cities of Europe, Great Britain having twelve special hospitals of this kind.

Beginning in a very small way, and with no endowment or pledged support, the hospital had received \$375,000 during the past fifteen years, of which \$75,000 had come from board of patients and sale of drugs to out-patients. Of the \$300,000 contributed from outside, the hospital now had \$25,000 invested for five free beds, and had paid \$150,000 for the new building, which was free of debt. But as it had no permanent or definite income he earnestly plead for gifts and moral support from those present.

During the fifteen years the hospital had treated 25,031 patients, of which 22,159 had been out-patients, who had made 118,154 visits to the hospital, and for whom 132,263 prescriptions had been written and filled. The 2,872 in-patients had spent 165,077 days in the hospital.

He called attention to the value of the hospital as an educational centre, instancing that thirty young men had been internes, and had acquired a knowledge of these diseases second only to that obtained by prolonged study abroad. He also stated that it was proposed to have clinical lectures in the hospital, free to physicians, which were to be further illustrated by a collection of Paris models and colored plates which had been loaned to the institution.

The new building, on the corner of Second Avenue and Nineteenth Street, is a modern fire-proof structure of four stories and basement, containing about sixty beds for patients; of these seven are in private rooms. On the top floor there is a modern operating-room, well equipped, the warden ward for children, and most of the private rooms. On the

next two floors are four wards for male and female patients with diseases of the skin and cancer. On the ground floor there is the large out-patient room, with consulting rooms, pathological laboratory, drug room, office, reception room, etc. In the basement there is a complete set of baths, including Turkish, Russian, needle and plunge, besides the kitchen, laundry, dining rooms, etc. The lighting, heating and ventilation are of the most approved kind.

"The Salt Habit."

The *Journal of Hygiene* says the use of salt as a condiment is so general and so universally believed in as necessary, that we rarely hear a word against its excessive use, but there are a multitude of persons who eat far too much salt; eat it on everything—on meat, fish, potatoes, melons, in butter, on tomatoes, turnips and squashes, in bread and on a host of foods too numerous to mention. To so great an extent is it used that no food is relished which has not a salty taste, and this hides more or less the real taste, which is often very delicate. Now, the amount of salt required in the system is comparatively small, and if the diet has been rightly compounded, very little is necessary. Some go so far as to discard its use altogether, but whether this is wise or not we will not here consider. What are some of the evils of the excessive use of salt? They are to paralyze the nerves of taste, or to pervert them so that they cannot enjoy anything which has not a salty flavor, and in addition there is a direct tax on both the skin and kidneys in removing it from the blood. Whether the skin is harmed by the tax, we do not know. Possibly it is not greatly injured, yet we know that few people possess a healthy skin; but it is now pretty well settled that an excessive use of salt does overtax the kidneys in its removal, and that the great number of cases of derangement and disease of these organs is due to this use. It takes only a little time to learn to enjoy many kinds of food without salt, and we advise our readers and others to look into this matter and to try and diminish the use of this condiment as far as possible. We

believe they will be better for it.—*N. Y. Med. Times.*

A Contribution to the Study of Human Neuroglia.

Dr. Edward W. Taylor, in the *Journal of Experimental Medicine* for November, 1897, ably discusses the greatly vexed question of neuroglia and tumors derived from it, and reaches the following conclusions:

1. The term glio-sarcoma should be dropped, as unscientific and misleading in its significance.
2. The problems regarding neuroglia demand varied methods for their adequate study.
3. With all the means at our command, the absolute determination of the relation of cells and fibres in individual cases remains difficult and at times impossible.
4. No criterion has yet been offered to determine a fundamental distinction between glioma and sarcoma (Stroebe); and secondly, between glioma and so-called gliosis (Weigert).
5. The development of neuroglia in all probability is from cells with protoplasmic processes to cells with differentiated and independent fibres.
6. Herein lies a possible reconciliation of the conflicting views concerning the ultimate structure of human neuroglia.—*Medicine.*

The Treatment of Fractures.

Dr. W. L. Estes, in an article on the treatment of fractures, in the *International Journal of Surgery*, says:

1. Unless a fragment is threatening to break through the skin the fracture should never be reduced except by the physician, and then only when apparatus is at hand to keep the parts in permanent apposition.
2. Men carrying an injured person should not keep step, as the jar to the wounded part is much greater.
3. Strychnia for shock, morphia for pain, but no alcohol.
4. Always give anesthetics for reduction of a simple fracture. It is better and easier to reduce and set compound fractures without anesthesia.
5. It is very rarely necessary to make

a patient go through the double agony of temporary and permanent setting of the broken bones.

6. In simple fracture gentle rubbing of the ends will assist in getting rid of shreds of tissue which invariably are caught there.

7. Nowadays a surgeon will rarely be satisfied that a bone is properly set, until verified by the X-rays.

8. Plastic splints, preferably plaster-of-paris, are surely the best apparatus when they can be applied.

9. Ambulant treatment is coming more into vogue. No simple fractures require constant confinement to bed, except of the innominate and upper third of the femur.

10. It is not necessary and sometimes very harmful to wait for swelling to disappear before putting on a permanent dressing.

11. A well-applied splint with good apposition of fragments should not be removed too early. It is not necessary to apply massage early in ordinary cases.

12. Proper time for massage is two or three weeks after fracture of upper extremities and four or five weeks for lower extremities—if the bones are slow to unite firmly.

Advantages of Lanolin as an Ointment Base.

Pure lanolin is perfectly neutral, is very difficult to saponify, and has no tendency to become rancid; its capacity for absorbing water is remarkable, taking up when kneaded with water about 110 per cent., forming a plastic, cream-like fat; it also combines freely with glycerine; in both forms—hydrated or with glycerine—it forms an excellent basis for ointments, pomatums and cosmetic purposes (*Pharmaceutical Era*). The extraordinary capacity with which lanolin and lanolin ointments are rapidly absorbed by the skin affords an unrivaled method of introducing effective remedies through the skin; as an evidence of how promptly this absorption and action takes place, the fact may be mentioned that, for instance, a lanolin corrosive sublimate ointment, containing but $\frac{1}{1000}$ per cent. of sublimate, produces the metallic taste upon the tongue within

a few minutes after application on any part of the body, as, also, that upon the application of a 10-per-cent. potassium iodide lanolin ointment the presence of iodine will make its appearance in about one-half to three-quarters of an hour after application. No one of the known fats approaches this extraordinary power of absorption, either by the skin or of water; lard associates with but 15 per cent. of water, and petrolatum stands in this respect lowest on the scale of all fats, absorbing but 4 per cent. of water and being least absorbed by animal tissue.—*Bulletin of Pharmacy*.

Coughs in Children.

An editorial in *Pediatrics* of December 1, 1897, says there are many varieties of coughs which do not proceed from pulmonary complications. Emil Mayer has recently published a pamphlet dealing with this not generally recognized fact. Some of these coughs which Thompson designates as useless are common both to adult and child, while one or two are peculiar to the age of childhood. These coughs, which are reflex in origin, are often the cause of much thought to the physician, and are by no means easy to diagnose correctly. The hacking night coughs of children fall into this category. According to Dr. MacCoy, of Philadelphia, these coughs are mostly due to naso-pharyngeal obstruction, and the reason that they are only troublesome at night is because when the child is in an erect position during the day gravity lends its force to facilitate the escape of the secretions from the nasal passages; but at night, when the child is lying down, this secretion cannot escape by these means, and the cough is brought on by mechanical irritation. Again, there is the paroxysmal hacking cough of children described by Dr. Francis Warner, of London. This cough occurs in children who, although emaciated and unable to eat, have a normal temperature and the physical signs of healthy lungs. Dr. Warner attributes this condition not to peripheral irritation, intestinal worms, affection of tonsils or pharynx, but to unbalanced central nerve action, and as his con-

clusions were based on the examination of 22,000 children in schools, he is in a position qualifying him to speak with authority. Lastly, there is the hysterical cough which is common alike to adults and children.—*Medicine.*

Avoiding a Lumpy Ointment of Yellow Oxide of Mercury.

Schweissinger (*Phar. Cent.*, through *Südd. Apoth. Ziet.*) states that it is almost impossible to prepare a smooth ointment with the dry oxide, even after long trituration, and he therefore recommends the following procedure: Dissolve in water the quantity of corrosive sublimate corresponding to the amount of mercuric oxide the ointment is to contain, and precipitate with sodium hydrate solution. Wash the precipitate, transfer it to a filter, and remove the water as much as possible by means of a suction pump. Then transfer it to a porcelain dish and mix it thoroughly with the fat. The water retained must be allowed for by taking correspondingly less of fat. As a vehicle, white vaselin is recommended rather than any other. Ointment bases containing free fatty acids are less suitable, as a decomposition of mercuric oxide might easily take place. This ointment should be dispensed in jars of amber color or in other ways protected from the influence of daylight. The author is of the opinion that other ointments, such as those of zinc oxide and ammoniated mercury, might advantageously be prepared in a similar manner.—*Bulletin of Pharmacy.*

Salicylate of Sodium Incompatible with Certain Acids.

Among our abstracts last month we mentioned that Robinson, commenting on the deliquescence that ensues when salicylate of soda and antipyrin are mixed, thought the change due to chemical action, but of what nature "was not known." A contributor to the *Annales de Pharmacie*, writing on the same subject, declares salipyrin, the well-known chemical, to be formed as a result of this union. The same writer also calls attention to the fact that when sodium salicylate is brought into contact with an acid, or an acidulated syrup

(strawberry, lemon, gooseberry, etc.), it is decomposed, salicylic acid being thrown down.—*Bulletin of Pharmacy.*

CYCLING AND THE SADDLE.—Injury of the prostate gland and the prostatic urethra from riding a faulty saddle is one of the most deplorable results that can follow the fascinating practice of cycling; likewise an improper saddle, by permitting pressure and irritation of the external genitals, sometimes develops the habit of masturbation in girls. With these elements of danger eliminated, it is by far the most popular and beneficial form of out-door exercise we are acquainted with.

The physician who thoroughly masters the saddle question, both from a scientific and practical standpoint, and advises his patients and patrons accordingly, may render them a very great service.

TREATMENT OF WHOOPING-COUGH BY PHENOCOLL.—M. Uargus, of Barcelona, first tried phenocoll in 1895, and derived from it very good results. I have used it, too, in seven children who were attacked with whooping-cough during measles. In all there was marked and rapid improvement. The remedy diminished the frequency of the attacks and their intensity; the nocturnal attacks especially were less frequent, and the total duration of the disease notably lessened. The dose administered, was from one to two grammes daily. M. Fabistocherski has had like success in forty cases at the Hospital "St. Olga." Without being a specific remedy, phenocoll offers real advantages in whooping-cough, and should always be resorted to when other remedies, particularly morphine, are contra-indicated, especially in young children, in whom the disease is often dangerous. There are no inconveniences attending its use.—*Med. Rev. of Reviews*, February, 1898.

PETROLEUM EMULSION.—Although the medical properties of petroleum have been known since a very early date, yet it is only within a few years that the remedy has been prominently brought to the attention of the profession. There can be no question whatever but that petroleum is an oil which is digested and absorbed like any of the fatty foods. The oil is emulsified by the pancreatic juices and absorbed by the lacteals. The Angier Chemical Co. put petroleum on the market in the form of an emulsion because they believe that as the process of emulsifying thoroughly breaks up the oil into minute particles, it thus predigests it and puts it in a condition so that it can be absorbed at once. The Angier emulsion has combined with it the well-known hypophosphites. Each ounce of the emulsion contains $33\frac{1}{3}$ per cent. of purified petroleum and twelve grains of the combined salts of lime and soda. In consumption, bronchitis, and in all the various diseases of the pulmonary tract, experience shows this preparation to be of great use.

Translations.

INVESTIGATIONS ON THE HISTORY OF MEDICINE.

TRANSLATED FROM DE BORDEU.

BY THOMAS C. MINOR, M D,
CINCINNATI.

SECTION I.

Galen a Decided Dogmatic—His Glory, His Eulogies, His Persecutors, His Abridgers.

Galen appeared in the second century of the church; his genius and talent soon made him distinguished. We know him principally by his works, where he never ceases boasting of himself. His books are full of valuable information; they constitute a complete work on medicine; as an encyclopedia it is fuller than that written by Hippocrates. Galen mentions almost everything; he had seen almost all diseases, too. He taught the art as learned from his own experience and practice, as well as from the opinions of his predecessors, that he collected with good judgment.

We know the vogue attained by the works of Galen. His reputation has lasted for centuries; his followers have eulogized him beyond measure. From whence arose this good fortune? From the merit of Galen? No doubt; yet but a happy combination of circumstances surrounding him brought out his good qualities in singular relief, and contributed as much as he did to extend his world-wide reputation.

First, his works buried out of sight all the works of those authors who preceded him; they were left, so to say, in a group by themselves; they were only known by the criticisms he made on them. It was impossible for him not to class himself above them; it was his decided taste to do that kind of thing, too. However, he had the honesty to humiliate himself before the works of Hippocrates; he took that great master mind for his patron; thus he joined his own personal glory to that of the Father of Medicine, as did Asclepiades and many other anterior authors.

In the second place, Galen united his ideas to those of Aristotle, that astonishing genius who was destined to make more brilliant conquests on earth than was his hero Alexander. Asclepiades, to the contrary, revolved around the philosophy of Epicurus, who had much less weight with ordinary men than had Aristotle. Was it possible that Galen, carried by the glory of Hippocrates and Aristotle, should have followed these two men? Is it astonishing that he arrived, having two such immortal guides, at the point of worldly grandeur he reached?

In the third place, as the philosophy of Aristotle has reached the point of destroying little by little the schools of theology up to the memoirs of Pythagoras, Plato and Epicurus, the fathers of the early church, accepted his works on medicine above all for giving a philosophic tone as to theology; so these churchmen were gushing in their praise of the glory of Galen; he turned away the faces of men from Hippocrates and fixed their glances on himself, while at the same time taunting the enemies of Hippocrates, and in avowing their objection to appropriate the Father of Medicine's doctrines. Galen was duly praised for all this by Saint Jerome and Saint Gregory, of Nice, who assured him of the support of the whole Christian church. The legal fraternity still further increased his authority as a physician.

Finally, philosophy, the system of medicine and Galen's manner of reasoning savored so much of the peripatetician, they gave such beautiful play to scholastic methods, that we are assured that, like the works of Aristotle they contained, removed a thousand obscurities and all the garrulities of logic and metaphysics that have since been drawn from them, as these same works of Galen contained a thousand lessons written in a proper tone for all the schools, that at once grew desperately attached to him.

Galen was, then, a very great man; but he was as fortunate as great. He was really as great in reputation, indeed, as were Hippocrates and Aristotle, to whom he attached himself.

He was doubtless more dogmatic than Hippocrates, yet, nevertheless, clung to empiricism. He succeeded better than Asclepiades in destroying and confounding the various sects that had divided medicine, and empiricism was mixed in with his dogma; rather, let us say, Galen created a complete system of dogma; he subjected the human body to the four qualities, the four humors, derived from the philosophy of Aristotle.

Was Galen really a greater physician than Asclepiades and other well-known empirics and methodists? We doubt it. Did he do real medicine more good than these same empirics and methodists? We do not believe he did. On the contrary, we think that he loaded down medicine with a thousand fatalities, that he stopped the progress of the art, that he buried it in a dirty puddle from which arose a cloud of biting insects, that afterwards floated the dust of the schools. We think, in a word, that the empiricism and the method, and even the manner, of Asclepiades will last even as long as Galen is known, like those ancient warriors of old who caused thousands of murders.

Physicians will say, God help us from another Galen, and especially from his pedant and burlesque army—for if you remove from Galen the crowd of commentators and partisans who have damaged his memory, thinking they were embellishing it, he would still be quite a genius by himself; but then half his glory would be gone, for it is due in part only to the multiplied echoes that have published him to the world, or to a great number of very sad and non-melodious instrumentalities that have given his praises a bitter tone, false and displeasing in every respect.

You may then hear, at times, fragments of those Gothic songs sung by the ancient school of Galenic peripateticians, who cry out: "We follow Hippocrates and Galen; the doctrine of these great men is perpetuated down to the present time. We are their imitators, their children, their disciples." To such we may respond courageously: "That

is not true. You wish to make the world believe so, because you dare not attack these great men, as some of your ilk has done. They have treated Hippocrates and Galen with contempt, and have regarded them, following the never-to-be-forgotten expression of Chirac, as blacksmiths!"

Let us add, if your manner of teaching and practicing medicine is as true as you flatter yourselves, Chirac was not wrong. Do not claim that it is wrong to be regarded as the legitimate marked descendants of Hippocrates and of Galen. Say they were in error, and place them in the class of empirics and perhaps charlatans, since you regard them as living in yourselves.

In conclusion, let us say that Galen succeeded well with an Emperor and with his son. He merited the protection of Faustinus; he was a friend of Demetrius, first physician to that Emperor. This won him many eulogists from courtiers, and these praises turned the heads of his rivals. Galen's fame became a poison to them, because it fell into bad ground.

SECTION II.

Medicine Among the Arabs—Averrhoes—His Troubles and His Glories—Foundation of the Faculty of Salerno and that of Montpellier—The Faculty of Paris.

Medicine finally fell into the hands of the Arabs. It enjoyed great popularity among this thoughtful and serious people, all great amateurs in poetry, and whose leaders were always the protectors of belles-lettres. Then it became more Aristotelian and peripatetic than ever, which could not be otherwise, since one of their caliphs had seen the spectre of Aristotle, who exhorted him to study the healing art. He therefore composed an admixture of the opinions of Galen and Aristotle, adding to these all the best knowledge of the known Arabian authors. A particular work was thus given to the world, in which the shades of Galenism were mixed with particular reflections, but especially with the empiricism particular to the countries inhabited by Arabs.

The works of Freind, a distinguished English writer, contain some most precious fragments of this Arabic medicine, that had great favor especially in Spain, from whence it spread throughout Europe.

The example of Averrhoes suffices to indicate how the Arabs made medicine and their doctors. This philosophic physician one of the greatest of his nation, the rival of Avicenna, had much to do with medical management; the application he made of medicines shows him not to be unworthy of the trust. He was a great partisan of Aristotle, but he merits the name of commentator *par excellence*.

The courage with which he bled one of his own children, aged six years, proves him to have been more of a physician than has been credited. This bleeding has at least served amateurs in bleeding to put Averrhoes among the number of their great men. It might be difficult to determine, however, when a true doctor should order phlebotomy.

Averrhoes had enemies. One of his *confrères*—that is to say, another physician—joined issue with noblemen and others of Cordova in their envy of him. They surprised him in an act in which condemnable sentiments were attributed to Averrhoes. This affair resulted in his injury; he fell into a trap laid by false witnesses; his enemies enjoyed the delicious spectacle; they saw him punished, scoffed at and insulted, for some even spit in his face.

But he was finally reëstablished in his just rights, and his persecutors taunted in their turn. He most gloriously escaped from their persecutions; he was a great man, a great lawyer, chief priest, and even Judge of Morocco, and acquired a brilliant reputation, that was meantime somewhat tarnished by foolish opinions into which vain subtleties led him to indulge.

The Arabic physicians founded schools. Those of Salerno and that of Montpellier had a bearing on France. The sage and learned author of the "History of the University of Paris" agrees that learning flourished at Montpellier before it was even taught at

Paris. He admitted this fact, although he had not yet conceived his idea of writing a medical history of France. If he entertained this notion, being convinced that the school of Montpellier was more ancient than any to-day in this section of France, he doubtless felt the necessity of pursuing a study of this celebrated school, for what would be a history of France in which the history of Montpellier was forgotten?

As to the Paris school of medicine, the historian places its first professors towards the end of the twelfth century. It would have been better to have left this out than to embarrass his readers in a labyrinth of very obscure discussions on the subject of episcopal and monastic schools. He did not believe, in order to prove the antiquity of the medical faculty, it was necessary to seek in ancient monasteries some curious writers and workers in books on medicine, who were, for the most part, copiers of Marcel and of the Arabs.

To speak truthfully, it makes little difference to the physician of Paris to have had for a founder Alevin, a regent of all France. It makes little difference that their predecessors united with ancient compilers.

All the physicians of that time were Jews and Arabs. It is believed, it is almost certain, that these Jews or these Arabs greatly valued the Hibernian scholars who were all the rage in those times of clerical clamoring, that the odd taste of some at the present day makes regard as the beautiful days of the scholars. Should physicians not felicitate themselves that they can impute naught to their ancestors on the persecution of the unhappy Abelard? This famous persecuted man was without doubt treated and cured by them, while that the large majority of savants of the period pursued him with blind fury to the end, even with less generosity than those ancient warriors treated their enemies or those of the State.

What modern doctor will regret that his predecessors were not included in this statute, that ordered all teachers "to have a hooded cape, black and falling to the heels, at least when the

robe is new, and they are forbidden to wear shoes turned up at the toes?" Who will object, then, that some one has conceived the idea of expunging from the list of physicians "one Jean de Saint Quentin, a Dominican, who, to give an example of his evangelical poverty, one day descended from the pulpit from which he preached to take off his Dominican habit, and a moment afterwards mounted the same pulpit before the same congregation?" That was a pleasant little comedy for a true physician to play.

It might be a good thing to decide, too, whether the physicians of Paris followed the dispersed and exiled university at the commencement of the thirteenth century; an examination of this fact might lead to important reflections. In fact, if the doctors of medicine followed the university into exile, what became of the sick in Paris? If they did not follow the university, this did not then belong to the body of that school?

If some followed and others remained in Paris, the latter were then false brothers in the healing art, who were only part of the medical body, yet who were true doctors, or those who saw and attended to the sick, while the others, professors, were mere haranguers in the school. We might say as much of other occasions on which the university ceased its functions. It does not appear that the really true physicians ceased to treat the sick; the latter were without doubt well protected.

Finally, we are sorry that a writer of more modern days did not leave unwritten the histories of the beadles of the Paris Faculty of Medicine. We have learned how the beadles found themselves in the celebrated fight between the Dominicans and deputies of the university, where the vigorous monks fell on these deputies with their staves, and also beat and maltreated the beadles as well.

But let us forget the medical scandals of these obscure ages, when the first rays of knowledge only led thinkers to better observe the darkness of former ignorance, and when medicine was

naught but pure and simple empiricism.

Who were our first masters but those who taught us how to read?—men who believed that medicine could be learned by reading, too; who, in place of applying empiricism to the treatment of disease, passed their lives in transcribing the works of Avicenna, commenting, making bad poetry, and afterwards indulging in disputations.

[TO BE CONTINUED.]

Influence of Diet on the Healing of Wounds.

One of Reuter's special service officials states that he has paid several visits to the hospital in which were being treated many Turkish warriors, and that he was struck by the warlike spirit of the wounded, and the frequency with which they asked the doctors, "Do you think I shall be well in time for the next battle?" These doctors are surprised by the wonderful vitality of the Turks. One man, who had his stomach penetrated by a bullet, not only kept his place in the ranks till the battle was over, but marched a distance of ten miles afterward. Another, with three wounds, two in the legs and one in the shoulder, continued in the performance of his regular duties for twenty-four hours after their reception, and would probably have kept about until they healed, had not an officer, happening to notice his condition, told him to go to the hospital; and it was with great reluctance that the wounded soldier went.

The doctors remark upon the rapidity with which patients recover from wounds, and attribute it to the abstemious lives led by the Turkish soldiers, who drink no wine, eat but very little meat, and take plenty of vegetable. They are examples of the saying, prevention is better than cure. By their manner of living they escape the effects from which grosser livers suffer when wounded.—*N. Y. Med. Times.*

In the treatment of acute cystitis five drops of the tincture of thuja every three hours is a valuable remedy.—*Med. Summary.*

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LECTURES ON THE ACTION OF MEDICINE: Being the Course of Lectures on Pharmacology and Therapeutics Delivered at St. Bartholomew's Hospital during the Summer Session of 1896.

By T. LAUDER BRUNTON, M.D., D. Sc. (Edin.), LL. D. (Hon.) (Aberd.), F. R. S. New York: The Macmillan Co. Price, \$4.00.

The writer well remembers the weary hours he has spent poring over the standard therapeutic text-books with but little more result than extreme vexation of spirit. Possibly there is no branch of medicine more uninteresting to the average medical reader than *materia medica* as it is contained in almost all the books on the subject. A work, then, which is at all entertaining, in which our subject becomes an enjoyable reading of facts not down in the ordinary text-books, but taken from a vast fund of personal experience, cannot help but draw to itself the highest praise. In the reading one becomes unconscious of the many truths he is absorbing, the anecdotes which have slipped in apparently unawares, but assuming the rôle of literary pegs, as it were, on which to hang his knowledge.

The scope of the work is best expressed in the words of the author, who is quoted at length: "I acknowledge at once that the lectures are imperfect. They are redundant in some parts and scanty in others. They are not well adapted for the purpose of cramming, and any man who tries to pass an examination on them alone will not be at all likely to get the maximum number of marks. . . . The first course of lectures that I gave in 1870 and 1871 were the fullest, the most complete, and, from the examination point of view, the most satisfactory. They were carefully written down and read aloud to the students, but, as I soon found out, students do not like read lectures. Moreover, the amount of information I gave to them in the hour was far more than they could comfortably take up, and it seemed to me that even the best of them, in

trying to grasp too much, got hold of too little, and the lazier ones did not even make an attempt. I then began to reconsider the matter, and thought of Solon's answer in regard to the laws which he had given to the Athenians. 'Are those the best you can frame?' said his questioner. 'No,' said Solon, 'but they are the best laws the Athenians can keep.' It appeared to me that Solon's advice had been taken also by a London preacher, who went to a friend of mine learned in history. 'I am going to preach a sermon on war,' he said; 'I want you to give me some facts.' My friend rattled off half a dozen pieces of information. 'Stop,' said the preacher, 'that is as much as my congregation will hold.'

I cannot resist the temptation of another quotation made in reference to the destruction of the lower forms of life by boiling; "When a student I went one day to a debating society, where there was to be a discussion on the *trichina spiralis*, that little worm that finds its way into the muscles and various parts of the body. One of my friends got up and said: 'Gentlemen, I am very much astonished that no one has thought of proposing an exceedingly simple and effective way of destroying this parasite. It has been found, gentlemen, that this worm dies at a temperature of 180°, and I therefore suggest that the patient should be placed in a warm bath, and his temperature raised to 180 F., and then the worms will all die.'"

The author is at his best when discussing technical subjects—antipyresis, action of heat and cold, hydrotherapy and its various methods of administration; especially is the article in reference to anesthetics to be commended. Possibly the most breezy and amusing feature in connection with the entire book is the easy and rapid style with which Hahnemann and homeopathy are disposed of, as many as two pages being consumed in the autopsy. A number of interesting pictures are introduced, which materially assist in grasping portions of the text more fully.

The course involves thirty-five lectures, and follows a plan very similar to

that of the Royal College of Physicians and Surgeons in their examinations in pharmacology. _____ M. A. B.

AIDS TO ASEPTIC TECHNIQUE.

By A. D. WHITTING, M. D., Assistant Surgeon to the German Hospital, Philadelphia. Philadelphia: J. B. Lippincott Co., 1898. Price, \$1.00.

This work is mainly intended for nurses or those who have charge of the preparation of surgical dressings, ligatures and sutures. Full directions are given for the difficult sterilization of cat-gut, silk, silkworm-gut, and kangaroo tendon. A chapter is devoted to the agents for procuring asepsis, chemicals, heat by hot air, steam and boiling. The book concludes with a description of what a modern operating-room should be. _____ M. A. B.

The Thyroid Gland.

The thyroid contains two proteids, a nucleo-albumen and the colloid matter; the former is present in small amount,

and is probably derived from the epithelium. The colloid is contained in the acini. It contains a small amount of phosphorus, a considerable proportion of iodine; it yields no reducing substance on treatment with mineral acids, and no nuclein bases, and is, therefore, neither a mucin nor a nucleo-proteid. On gastric digestion it is readily split into a proteid and a non-proteid part; both of these, but especially the latter, contain iodine. The non-proteid part contains all the phosphorus of the original substance. The ordinary extractives are fairly abundant, but the colloid is the active physiological constituent of the gland; both parts of it are active, but the non-proteid part is the more active of the two.—*Therapist*.

A BALTIMORE judge has decided that faith-cure doctors are not legally entitled to remuneration for their services. He takes the ground that the faith-cure physician renders no apparent service to the sick.

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THE
Cincinnati Lancet=Clinic.

A Weekly Journal of Medicine and Surgery.

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**TYPHOID FEVER: PRACTICAL
VALUE OF THE BLOOD-
TEST IN DIAGNOSIS.¹**

BY GEO. E. MALSARY, M.D.,
CINCINNATI.

The diagnosis of typhoid fever is usually easy. Although no symptom of the disease is pathognomonic, yet clinicians have come to place reliance upon certain combinations of symptoms. Thus as characteristic symptoms may be mentioned: (1) the dulness, headache, insomnia, etc., which go to make up the typhoid state; (2) the so-called typhoid fever curve; (3) the abdominal symptoms, including the enlarged spleen, meteorism, peculiar stools, etc.; (4) the rose-colored lenticular spots; (5) certain complications, especially heart failure, peritonitis and hemorrhage. In almost every case there is a sufficient number of these symptoms present to enable one to arrive at a satisfactory diagnosis.

But the diagnosis is not always easy. It is in those cases of typhoid fever in which the diagnosis heretofore has been difficult or impossible that the blood-test promises to be of the greatest assistance. Many cases of typhoid fever are atypical. Thus the typhoid state may not be well marked, especially early in the disease, and frequently is found in other conditions. The fever often is not characteristic. Indeed, we are all acquainted with many variations from the typical fever curve. The abdominal symptoms are exceeding variable. Diarrhea may be present early in typhoid fever, but

frequently there is no diarrhea. Many cases show constipation. The stools, likewise, may not be characteristic. Enlargement of the spleen may be found in non-typhoid cases. The same is true of meteorism. As to the roseola of typhoid fever, other cases may show spots so closely resembling this eruption as to confuse even the most experienced. The eruption is not always typical. The complications are of little practical utility in diagnosis, as a rule, since usually it is desirable to make the diagnosis before these appear. Further, the complications common to typhoid fever may occur in non-typhoid cases.

In cases presenting but few or no well-marked symptoms of typhoid fever, further aids in diagnosis are most welcome. In such instances the blood-test is of undoubted value.

HISTORICAL SKETCH.

The blood-test for typhoid fever depends upon the detection of certain principles found in the body as the result of infection by the typhoid bacillus, and which are known to produce certain effects upon that bacillus. For a long time it has been known that second attacks of typhoid fever are exceedingly rare, and that in all probability this exemption could be attributed to some change effected in the body by the disease. Some idea of the rarity of second and succeeding attacks of typhoid fever may be afforded by the investigations of Maiselis (cited by Sternberg), who, in the literature accessible to him in 1894, found only 202 recorded cases of second attacks, five third attacks, and one fourth attack of typhoid fever. As long as ten years ago it was shown by Chantemesse and Widal that there is a distinct antagonism between the typhoid bacillus and the blood of animals rendered im-

¹ Read before the Academy of Medicine of Cincinnati, February 7, 1898.

mune to typhoid infection. These observers found that immunity may be conferred upon the guinea-pig by injecting subcutaneously small quantities of serum obtained from an individual who had suffered an attack of typhoid fever. It is well known that serum obtained from an individual who has not been infected by the typhoid bacillus will not produce this effect.

Stern (*Deut. med. Woch.*, 1892) reported a case in which there was remarkable bactericidal power exhibited by the blood seventeen and a half years after an attack of typhoid fever, although in general he found this power diminished in the blood of recent convalescents from that disease.

Charrin and Roger, 1889, noted that immune serum may cause clumping of specific bacteria. They observed agglomeration of the bacillus *pyocyaneus* when grown in the serum of animals rendered immune from infection by that bacillus.

Metschnikoff, 1891, found not only clumping, but also immobilization of the vibrio *Metschnikovi* when grown in immune serum.

Bordet, 1895, was the first to dilute the serum. He noted that if a small quantity of immune serum be added to a suspension of the spirillum of Asiatic cholera in salt solution or bouillon, the spirillæ lose their motility and form clumps.

Durham, 1896, made the first thorough and systematic study of the property of typhoid serum in causing clumping and immobilization of bacilli outside the body.

Widal, June 26, 1896, in a communication to the Société Médicale des Hôpitaux, showed that this reaction is present during the period of infection, and is of value in diagnosis even early in the course of the disease. He at that time used serum in making the test.

Later Widal and Sicard stated that "although the use of serum undoubtedly enables the results to be recorded and compared with greater scientific precision, we find that dried blood answers just as well for routine diagnostic work."

The use of dried blood, collected upon paper, was popularized by Wyatt

Johnston, of Montreal (American Public Health Association, September 17, 1896). Indeed, no little credit is due Dr. Johnston, through whose energy the importance and practicability of this test has become recognized by the principal municipal laboratories of our country.

Gehrmann recommended the collection of the blood upon mica for dried blood specimens, from which it may be more readily dissolved in water. At the present time the ordinary glass slides are in common use. Sterilization of the slide is not necessary.

NATURE OF REACTION.

The principles of diagnostic value in the blood-test for typhoid fever are the clumping and paralysis of the typhoid bacillus. Notwithstanding the fact that the reaction is sometimes present in urine that does not respond to the test for albumen, and absent in albuminous urine (Widal), the reaction seems to depend upon the presence of the albuminoids. The reaction is absent in typhoid cases when we use for the examination fluids that are poor in albuminoids (the cerebro-spinal fluid and saliva), or other fluids from which the albuminoids have been removed (milk and blood). On the other hand, the casein of milk, and the fibrinogen and globulin of the blood, in cases of typhoid fever, have powerful agglutinating properties. The whole blood, containing all the albuminoid elements, is more sensitive to the reaction than is the serum alone.

The agglutinative power is not confined to the blood in typhoid fever, but is seen also in other fluids of the body. Thus it is found in the serum of blisters, which is largely used for making the test. Occasionally it is met with in the urine. It has been found by Widal and Sicard in the pericardial, peritoneal and pleural fluids. A marked reaction can be obtained from the milk of nursing women affected with typhoid fever, and has been seen in the milk or colostrum of rabbits and the milk of goats inoculated with the typhoid bacillus.

Etienne found that in a case of grave typhoid fever, which provoked abortion

in a pregnant woman, the blood of the mother gave a marked reaction, but no reaction could be secured with the blood of the fetus. In rabbits inoculated six hours before labor (Widal and Sicard), the fetal blood agglutinated the bacilli from birth, although not so strongly as the blood of the mother. Wilson and Westbrook (*British Medical Journal*, December 18, 1897) report that a child born at the seventh month, of a mother who had typhoid fever, gave a typical reaction as late as the fourteenth day of its age. The question, of course, arises whether this might not have been due to the introduction of the agglutinative elements into the fetal circulation through traumatism, instead of through the normal placental circulation.

The reaction given by the saliva is negative, although it has been shown by Achard and Bensaude that a positive reaction may be obtained by collecting the submaxillary and parotid secretions within the gland ducts. The aqueous humor and the secretion from the lachrymal gland give the reaction. Widal and Sicard obtained a positive reaction by the use of the tears in ten out of fourteen cases with the natural secretion, but in only three of the cases when the flow of tears was provoked artificially.

The degree of clumping obtainable does not always correspond with the severity of the attack. Widal remarks "that although a low agglomerating power is usually observed in mild cases, the gravity of typhoid fever is far from always being proportional to the agglomerating power." It is his opinion that the agglomerating reaction generally decreases in intensity at the beginning of convalescence and even during the period of the decline of the disease, and this he thinks proves the truth of his statement that it is mainly a reaction of the period of infection. On the other hand, a number of observers report cases and experiments which seem to show a more close relationship between agglutination and immunization than between agglutination and infection. But there is no necessary correspondence between the degree of immunity and that of agglutination.

Recently Widal called attention to the fact that the agglutinating power is sometimes considerably diminished during the days immediately preceding death, particularly if the latter occur solely from typhoid intoxication. He considers this another proof that it is a reaction of infection rather than of immunity.

The clumping of the bacilli is supposed by Gruber to be due to the presence of certain substances, which cause the bacilli to stick together. To these substances he has given the name "agglutins," but the presence of any such bodies has not been proven; that is to say, they have never been isolated.

The reaction of agglutination has been found applicable to both motile and non-motile pathogenic bacteria, and has been demonstrated for typhoid, Asiatic cholera, pneumococcus infection, tetanus, pyocyaneus disease, glanders, Malta fever, colon infection, proteus infection, psittacosis, hog cholera, and several other infections. In all these diseases the specific cause, bacilli, spirilla, etc., are agglutinated or clumped by their respective sera. Thus, in hog cholera we are able, by means of the serum reaction, to determine very readily whether or not a specimen of meat came from an infected animal. In four cases, Cashin, of Louisville, verified such a diagnosis by a post-mortem examination.

In the case of living motile bacteria, immobilization as well as clumping is necessary to form a complete reaction. These two processes do not always go hand in hand, so that it is supposed that they are due to different principles.

As in the case of the other protective modifications of the fluids of the body, the normal blood may possess to some degree the principles that form the basis of the test for typhoid fever. But these are always increased in typhoid fever. The test is quantitative rather than qualitative, and in some cases considerable dilution of the fluid examined must be practiced in order to determine the character of the reaction.

The specific reaction has been found in some cases in which there was no suspicion of typhoid fever. As early

as 1894 Stern saw that in some cases a protective influence was exercised upon animals by blood from individuals who gave no history of typhoid fever. He suggested that possibly this was due to previous mild or unrecognized infection.

Wilson and Wesbrook have reported the results of the examination of 817 cases of suspected typhoid fever and 76 cases of other diseases. Among the latter, a case of influenza, one of acute mania and one of puerperal mania gave positive reactions. Another positive reaction was obtained in a case of poliomyelitis with irregular temperature. They state that in none of these cases could a previous attack of typhoid fever be excluded, all having resided in a city where the disease was frequently epidemic.

The serum obtained from typhoid cases has been found to not cause clumping and paralysis of any micro-organism except those found in typhoid fever. Thus, negative results have been reported with the bacillus fluorescens, bacillus indicus, bacillus violaceus, the spirillum cholerae Asiaticæ, spirillum Metschnikovi, spirillum of Finkler and Prior, the bacillus of hog cholera, bacillus of malignant edema, and the bacillus of tetanus. Thus it has been discovered that the use of typhoid serum is of value in differentiating certain bacilli resembling the typhoid bacillus. This fact finds especial application in the examination of drinking water.

The question is often asked whether the bacilli are killed in this reaction. It has been found that cultures may be made from these bacilli, but this growth may be due to the development of bacilli that are not paralyzed and aggregated into clumps, since in every preparation there will be found a few such cells still enjoying their freedom.

The principle of agglutination is not necessarily a principle of life; that is, it is not necessary that the bacilli be alive to secure the reaction of agglomeration. Pure cultures killed by exposure to a temperature of 60° C. for half an hour, or, better, by the addition of a drop of formal to the culture, still preserve the agglutinating power for several months. At the present time this fact is of little

practical utility, as, especially when dried blood is used, more diagnostic importance is attached to paralysis than to clumping of the bacilli. For this purpose living cultures are necessary, as a matter of course. Pseudo-typhoids sometimes exhibit clumping more quickly and completely than true typhoid fever.

FAILURES.

In some instances the blood-test for typhoid fever has been reported to be positive in non-typhoid cases, and negative in cases of typhoid fever. Such failures may be attributed to a number of causes.

In the first place, the reaction may persist even for years after an attack of typhoid fever. We have already referred to the case reported by Stern, in which the reaction was marked seventeen and a half years after recovery from typhoid fever. A still more remarkable case is recorded by Apple and Thornbury (*Four. Amer. Med. Assn.*, Vol. xxviii, No. 6, p. 242), in which the reaction was decided thirty-one years after an attack of the disease. Such cases are rare, but they render the previous history of value. Thus, Musser and Swan (*Four. Amer. Med. Assn.*, Vol. xxix, No. 7, p. 310) report the case of a patient under treatment for chlorosis, in which a distinct reaction was found, but inquiry discovered a history of typhoid fever ten years previous.

Not long since the essayist had a case under treatment in which the symptoms and physical signs were very suggestive of typhoid fever. The following is a short synopsis of the case:

Mr. C. G., aged nineteen, stated that he did not feel as bright as usual, and was unable to continue his work, which was of a clerical nature. There was a temperature of 102.4° F. in the evening, 100.2° in the morning, and 102.7° next evening. Pulse 105. Urine acid, sp. gr. 1010, Nylander test for sugar negative, Spiegler test for albumen positive but slight. Bowels irregular and loose. Tongue coated. The patient had been drinking Ohio River water in its virgin state. Examination of the abdomen showed rose-colored lenticular spots, tympanites, and the spleen somewhat

enlarged. In addition, the urine presented the diazo reaction, though not marked. In this case the blood-test for typhoid fever was distinctly positive. However, inquiry into the history revealed an attack of typhoid fever five years ago. Physical examination of the lungs was entirely negative. Upon questioning, his parents stated that occasionally they heard the patient cough, but to this they had attached no importance. A careful examination of the sputum failed to disclose the tubercle bacillus. A test injection of Koch's old tuberculin gave a decided reaction, and under the use of Koch's Tuberculin R. the patient soon recovered.

As a rule, there is no reaction to the blood-test for typhoid fever after the lapse of one year. Some cases are on record in which the reaction ceased very soon after the attack. Kneass (*Four. Amer. Med. Assn.*, Vol. xxix, No. 1, p. 16) reports two such cases, one negative in ten days, the other in forty-three days, after the fall of temperature.

But the cause of the majority of failures in practical work with this test is to be found in the fact that we are not always able to obtain a clear history. As already stated, Stern (1894) found in animals a protective influence exercised by the blood of persons who gave no history of typhoid fever. This finding he attributed to mild or unrecognized previous infection. Here we may mention the cases reported by Block (*Four. Amer. Med. Assn.*, Vol. xxix, No. 1, p. 7) who found the reaction in three cases of coma, one due to pernicious malaria, another due to diabetes, and the third probably due to scarlet fever. It would be interesting to know whether the reaction was present in these cases before coma supervened. Block made a number of examinations of other cases of malaria, diabetes and scarlet fever, but did not find the reaction, and this much of his observation has been repeatedly confirmed. The essayist has never obtained a reaction in these diseases, except in cases with a history of typhoid fever. Indeed, an almost innumerable number of other diseases have been examined with negative results. Out of eighty-seven such cases, including tuber-

culosis, rheumatism, appendicitis, malignant tumors, diphtheria, scarlet fever, measles, leprosy, meningitis, leucemia, etc., Guerard found the reaction positive in but one case, and in that instance he states that the diagnosis was doubtful. Previous typhoid infection might also be offered as an explanation for three other cases reported by the same observer. One of these was a case of endocarditis complicated by malaria and another was a case of miliary tuberculosis. The third case was a fever of short duration, which gave a reaction on the second day. At the time there were four members of the patient's family sick with typhoid fever, and it would seem possible that this might have been a case of light typhoid infection.

A source of no little annoyance, when examining the history of these patients, is the observation that the previous typhoid infection is not always properly named. An excellent example is reported by Apple and Thornbury, in which they secured the reaction in a case of influenza with nervous symptoms—headache, prostration, fever, bronchitis, etc. In that case the history revealed an attack of "typho-malarial" fever some eight years before. The influenza bacillus was isolated from the blood. It is interesting to note that the same observers found five negative examinations of the blood, contradictory to the clinical diagnosis, in which the subsequent histories tended to confirm the bacteriologic rather than the clinic diagnosis. On the other hand, two cases have been reported (Widal and Guerard) in which the reaction was not found to be present, although typhoid bacilli were obtained from the spleen. These instances are unique, but deserve notice, since they are reported by competent and experienced observers.

Another cause of failure may be found in the fact that the reaction, although usually present by the end of the first week, may be delayed even far into convalescence. Further, in some cases the reaction has been found to be intermittent, being present some days and absent at other times. Therefore, when the blood-test is found to be negative, repeated examinations may be of value. Only very rarely is the reaction delayed,

so that if no reaction is found as late as the tenth day, upon careful and repeated examination, the evidence is practically sufficient to exclude typhoid fever.

Some reports, made by reliable bacteriologists, seem to give a high percentage of failures. But a closer examination of such reports will usually show that the large number of failures is apparent rather than real.

Thus, Cabot reports five negative reactions in 101 cases of suspected typhoid fever. One of these was seen only early in the disease, and died the following day. Had the patient lived, later examinations might have been positive. Three of the cases were seen only late in the disease. If these were cases of typhoid fever, it is possible the reaction had disappeared before the time of the examination. In the fifth case the reporter says the reaction was persistently absent, despite every evidence, except autopsy, that it was a case of typhoid fever. Of course, it is possible that this case might have been cleared up by an autopsy. Some cases that do not respond to the blood-test for typhoid fever, in which the symptoms strongly point to that disease, may be due to infection by the bacillus coli commune. In such cases the blood will cause clumping of the colon bacillus.

Since the typhoid blood-test, which is a delicate one, is frequently made by men who are not experienced in laboratory work, and almost every observer has his own technique, it is remarkable that so few failures have been recorded.

METHOD.

The test is usually made with the blood or serum, since the reaction has been found more constant with these fluids than with the other preparations that have been used for this purpose. The method of making the examination shows almost as many modifications as there are observers. We will first consider the slow, macroscopic or test-tube method. When making the test in this way, the blood is obtained by deep puncture of the finger, or better from a vein, as from that in the bend of the elbow (Widal), by means of a hypodermic needle. In this procedure it is

necessary to be aseptic in order to prevent contamination of the specimen. The blood is then placed in a sterilized vessel, such as a thimble or test-tube, and the serum is allowed to separate. This process may be facilitated by means of the centrifuge. Some of the serum is then added to a bouillon culture of the typhoid bacillus. If the reaction is positive, in twelve to twenty-four hours there will be found at the bottom of the test-tube a precipitate of agglomerated bacilli; if the reaction is negative, there will be no such precipitate. It is necessary to use the microscope to determine whether or not the precipitate is composed of bacilli.

This method of making the test, in its various modifications, has been found satisfactory, but it is now known not to be as delicate as the quick or microscopic test, and it is not so trustworthy.

The microscopic test is sometimes referred to as the quick method, since it requires but a few minutes, whereas the test-tube or slow method requires twelve to twenty-four hours. More blood is required for the macroscopic or slow method, 0.5 to 2.0 c.c., than for the microscopic method, which requires but a drop.

The microscopic test is made in a number of ways. The most exact results may be obtained by the use of moist specimens. Thus, by using small sterile tubes containing known quantities of bouillon, and adding to them a definite quantity of serum from the case of suspected typhoid fever, then inoculating each tube with a certain quantity of a particular kind of culture of the typhoid bacillus, noting the time and degree of the reaction, we are able to make fairly exact quantitative tests. This observation is sometimes of practical value, for certain non-typhoid cases are recorded in which the reaction was present in slight degree when the serum was not sufficiently diluted. The principal criteria of reaction, which have been studied by this method, are the effect of virulence of the culture, dilution of the serum, and the length of time required for the reaction. For the inoculation of the tubes it is best to use a twelve to twenty-four hour agar culture made from

a stock culture a month old. The cultures should always be examined microscopically before making an inoculation. It has been found that the more rapid the motion of the bacilli the more reliable is the test. Usually a proportion of one part of serum to ten parts of bouillon, to which is added a trace of the culture, will cause complete clumping and paralysis within fifteen minutes, if the reaction is positive. Should the reaction not be distinct in this time, a higher dilution, say 1:50, may be used, but this is rarely necessary in diagnostic work. Block believes a reaction in a dilution of 1:40 is pathognomonic of typhoid fever. The higher the dilution of the serum, the greater is the time required for reaction. Thus, where very great dilution is practiced, six or eight hours (Stern) may be required for a complete reaction, although two hours is usually sufficient (Stern, Widal). If the reaction be negative when equal parts of serum and bouillon are used, typhoid fever may be definitely excluded. If in any case the test should be undecided, it would be safer to make a provisional diagnosis of typhoid fever, even should this be later discarded, than to fail to recognize any cases of the disease.

But a method that is best for exact scientific work is not necessarily best for making examinations in general. A great practical advance was made when it was found that dried specimens could be used for making this examination. Specimens of dried serum may be readily obtained by collecting a drop of blood upon a glass slide, held at such an angle that the blood will run to the end of the slide. In this way there is secured a film that is largely composed of dried serum. But the whole blood is better than serum for making this test. Thus, only a drop of blood is required, which may be collected upon paper, or better upon a glass slide, and the dried blood may be sent any distance, is not affected by climate, and keeps for a long time. When the specimen is to be examined it is moistened with a drop of distilled water. Of this mixture a trace, not sufficient to cause distinct coloring, is then added to a drop of an emulsion of the typhoid bacillus. The emulsion of

the typhoid bacillus is prepared by adding to a drop of distilled water a trace of a twelve to twenty-four hour agar culture of the typhoid bacillus. The trace of suspected blood may be added to this emulsion either in hanging drop or upon the ordinary slide. It has been shown by Widal that the contact of the specimen with the slide and cover-glass favors the reaction, but the reaction would seem to be more certain when made in the hanging drop. Welch has suggested that the presence of fibrinous masses, granules and material foreign to the blood, may explain in part the greater frequency of partial reactions with normal blood, when dried blood is used. But this should occasion no confusion, if the examiner is at all acquainted with the principles of bacteriology. The chief objection to the use of dried blood is that quantitative examinations cannot be made. But if the examination is made as we have just described, the dilution is more than 1:10, and only in very rare instances will the test not be found satisfactory. Should an indefinite reaction be obtained by the use of dried blood, it might be well to request a specimen of fluid serum, for the purpose of making a quantitative test. The use of the serum of vesication was first suggested by Widal (July, 1896), but was first extensively used in practice by Guerard in investigations begun in September, 1896. For this examination sufficient serum may be collected, in from eight to eighteen hours, by the application of a fly blister so small that it will give little or no inconvenience. The serum may be collected in a capillary tube and the ends sealed, unless the examination is to be made at once. It is necessary to prevent contamination of the specimen whenever using fluid serum. In the use of this serum Guerard does not report as positive any reaction later than fifteen minutes in a dilution of 1:10. If a greater dilution is used, a longer time is required.

Some objection has been made to the use of agar cultures in making the examination, since it is held that an inexperienced person might mistake a small fragment of the culture for a clump of bacilli. But anybody familiar

with the microscopic appearance of an agar culture of the typhoid bacillus would never make such a mistake.

There have been some differences of opinion as to what should constitute a positive reaction. With our present knowledge, in no case should a reaction be considered positive in which there is not both clumping (Stern) and paralysis of motion (Kuhnau).

The absence of reaction in a case showing typhoid symptoms may be sometimes explained by finding a marked reaction to the colon bacillus. Such a case is reported by Vedel, in which he made a diagnosis of colon infection.

A number of observers have reported different degrees of reaction secured by the use of cultures of the typhoid bacillus obtained from different sources.

Widal and Sigard some time ago remarked that "the alterations in reaction induced by very slight modifications of the manner of testing help to explain differences in the results reported by experienced and careful observers."

VALUE AND LIMITATIONS.

Here it is interesting to compare other elements of diagnosis, especially the search for the typhoid bacillus. Richardson examined 109 stools in forty-nine different cases, thirteen of which were typical typhoids in the febrile stage. The isolation of the typhoid bacillus was accomplished in but ten cases, in but nineteen out of fifty-five typhoid stools. In one case the bacilli were found on what was said to be the fifth day of the disease, but the reporter states that the history was somewhat indefinite and the disease was probably further advanced. Two cases were positive on the eleventh day, and the other seven cases ranged from the twelfth to the thirty-sixth day. Only seven cases were positive on the first examination. In two typical typhoid cases, six stools in one case and eight in another were searched by both the Elsner and the Capaldi methods, but the typhoid bacillus was not isolated. All thirteen cases gave well-marked serum reactions at least two days before

the typhoid organisms could be recovered from the stools. However, Kolle has reported two cases in which the bacilli were isolated from the stools on the tenth and eleventh days, and the serum reaction was not obtained until the sixteenth and seventeenth days. Such cases must be exceedingly rare. On the other hand, Remlinger and Schneider claim to have found the typhoid bacillus in one-half of the non-typhoid stools they examined. This observation has not been confirmed, but Chantemesse found typhoid bacilli in the stools of an apparently healthy person, who took care of typhoid patients.

The difficulties attending the search of the feces for typhoid bacilli are so great and the value of such an examination so uncertain as to render it of little practical utility, except in the very rare cases of delayed reaction to the blood test. Moreover, it is not always an easy matter to obtain specimens of the feces for examination, especially in those cases complicated with constipation. The bacilli might be obtained by puncture of the spleen, but this procedure is not without danger, especially if the spleen is enlarged and friable; in fact, rupture has followed puncture for this purpose. The bacilli may be cultivated from the roseola spots or from the blood, but not with sufficient regularity to be of practical value in diagnosis.

From this brief consideration of the elements of diagnosis in typhoid fever, it is evident that the blood-test affords by far the greatest aid in diagnosis at a time in the course of the disease when this is most important. Heretofore the early differential diagnosis between typhoid fever and a large number of other conditions has oftentimes proven difficult, or even impossible, to the most acute diagnosticians. In children, especially, the symptoms of typhoid fever are uncertain, and the blood-test, therefore, is of especial value.

Upon the whole, when properly made, the blood-test for typhoid fever furnishes almost, if not absolutely pathognomonic evidence, premising always that there has not been a previous attack of the disease.

Addresses.

INAUGURAL ADDRESS OF THE PRESIDENT¹.

BY LOUIS SCHWAB, M. D.,
CINCINNATI.

Fellow-Members of the Academy:

To be chosen to the highest place within the gift of this association is to me far more precious than any office the public could confer. Appreciation of this great honor is assured you with gratitude inexpressible. In approaching the performance of the duties of the office, it is earnestly invoked of you to extend the same aid to the new incumbent that in the past year you so generously gave the distinguished gentleman who this night retires from his year of successful service. The good of the institution will be your chairman's first consideration. To this end he will bend all the energies of his mind. Zeal, however, must take the place of personal qualifications and attainments, and willingness to watch and work is the only substitute he can offer for merit.

The society now numbers 327 members—men and women—all engaged in the one common purpose of self-improvement, that they may be the better prepared to labor in their various fields for the good of mankind. In this membership are found the ablest representatives of the various departments in which the unfinished science of medicine is divided, and from these, without a selfish motive, carefully prepared thoughts and observations are brought to these meetings, to the profit of all who listen; and that other group, they who follow in the footsteps of the fathers, whose work leads them to the stricken on the hillside or in the valley, along the avenue or in the alley, in the palace or in the hut, are found in these ranks ceaseless workers in the advancement of the craft. Without classification or arrangement, this society of professional friends mingle together in these

weekly convocations, brooking neither envy, discord nor confusion, encouraging but never decrying honest effort, inviting but never repelling honest criticism, stimulating contention without disturbing emulation; and the hope is here freely expressed that these excellent conditions will always be maintained.

Those interested in the diseases of childhood, and who are familiar with the laws governing the development of early life, have ever found here a hearty welcome for any contributions they were inclined to offer. The masters in the field of pelvic and abdominal diseases, as well as those most interested in general surgery, have always, by their attractive subjects, drawn to these meetings spirited attendance. Observers in still more special work, as the skin, the nose and throat, the eye and ear, and the nervous system, have found here an interested audience not only in those doing similar work, but in the person of the general practitioner, to whom no branch of medicine is without importance.

Papers on midwifery in some of its branches, although more strictly reserved for the special society for the subjects, might nevertheless be fruitful topics for delivery and deliberation at our meetings.

Let the appeal go out for the year just initiated that something be brought to enrich these weekly services, whether it be from the records of private practice, from the observations noted in the asylums for the young or aged, from the vast institutions in which human beings bereft of reason are intelligently cared for by medical skill, or from the great hospitals of our grand old city, within whose limits the injured and diseased receive the attention of the most brilliant clinicians.

It was suggested a year ago that the Academy should have occasional discussions on the etiology, symptomatology, diagnosis and treatment of diseases most commonly met with. This advice is timely, and is, indeed, a duty plainly laid down in our book of the law. But diseases not commonly met with should receive the same attention, and, as was

¹ Delivered before the Academy of Medicine of Cincinnati, March 14, 1893.

suggested in the inaugural a year ago, the subject could with better results be divided among members for preparation and debate. In the consideration of diseases we are apt to give importance to all the divisions, to the almost total exclusion of treatment. Some of you may perhaps be able to recall in what derision therapy was alluded to by many eminent men, who seemed to rest satisfied with their work by invoking the sufficiency of morbid anatomy. The individual who sought to correct conditions by appealing to eliminating functions, who guarded the skin that he might use it to unload overburdened organs, who stimulated tardy intestinal secretions, or renal inactivity, who, in brief, toiled in the field of therapy in the hope of wresting from it products which he might apply clinically, was more "pitied than applauded for his pains" by those who were more charmed to explain the cause and effects than suggest a cure for disease. Remedial agents have not often been the subject of discussion in our sessions, and yet, when considered by the society, they have elicited the greatest interest, and have generally created long and earnest debate. The field of therapy throughout all ages has been patiently and perseveringly explored, with perhaps but meager returns, and yet remedies are a part of our tools; we need them every hour we are at work, no department of medicine can proceed without them, and if their use is still in large part empirical it is but another evidence that their careful study in such councils as this be the more encouraged.

Bacteriologists have unlocked and laid bare the causal factors in many of the diseases that invade the human body, and the changes these produce in tissues and organs have been studied to a perfection that challenges the admiration of the world. Stimulated and inspired by these discoveries, toilers in the field of therapy invaded the animal kingdom, and from their serum agents have been secured whose effects in preventing and controlling disease are "little less than magical." By the aid of chemistry's laws, toxic materials have been found to exist within the human body, the re-

sult of nutritive changes and subsequent imperfect elimination, impairing bodily functions, causing widespread suffering and sometimes changes in tissues; and yet by the same laws elements have been woven together, creating products which, when taken into the body, produce speedy relief, and may by solvent action often effect cure. Let us hope that some one, enchanted by leaf or flower, will rescue from obscurity, from Nature's bosom, some member of the vegetable kingdom and give to the family of man a new antidote for at least one of his many poisons.

The arrangement of the programme reserving one meeting night of the month for the report of cases seems to have given general satisfaction, and its continuance is strongly recommended by your chairman.

It is the judgment of the chair that the Committee on Essays could very greatly enhance the interest of members by prearranging discussion of the paper of the evening. In this manner many members might be induced to participate in the work of the society who otherwise hesitate to take the floor, and, like some not unknown to the chair, reserve their strength for "wise and masterly inactivity."

It is a pleasure to be permitted to record the most peaceful and happy relations with kindred organizations. Accredited representatives have been sent during the year to the State, National and other councils, and, according to report, the delegates have at all times acquitted themselves with credit and honor to the Academy. The great strength of this society among the working organizations of the Nation leads to the suggestion of more intimately fostering these amiable relations.

We have an abiding-place, but not a home. If we had searched every part of the city we could not have found a more cozy spot than this, and yet it is not our own. Our every want seems here supplied, our every comfort secured, but we dwell in the house of others. Within these walls we are shut out from the world, and are spared the tumult of the busy highway. Heat and light are given us in plenitude. Perhaps it may

be justly said that the Academy in all its history never enjoyed such pleasant quarters, but the solacing influences of our own fireside are wanting. Years ago we sought by uniting our offerings to erect our own temple, but failed; enthusiasm at the time fired our efforts, but it has flagged. Time, in its flight, seems to have dimmed desire, and the temple exists only as a dream. It seems cruel to pronounce these words, and yet they are true. With over three hundred active members and a fair fund in the treasury, we dare not yet proceed with our building. Our library of nearly one thousand volumes, the voluntary gifts of noble men, still languishes, like an orphan, somewhere because we have no niche our own in which to care for it.

We are asked to be comforted with the thought that the fund accumulated by personal subscription is safely lodged in paying investments, and that from its earnings the fabric will be built, perhaps by one of the coming generations. Your chairman inclines to the belief that if the society has not abandoned the idea of establishing its own home the existing depression in the valuation of property would make the present the best time in which to proceed, and that under resolution the Board of Trustees should be granted full power to act at once.

Forty-one years ago eighteen medical men planned the present Academy of Medicine; of this number one is still spared to us. Time has not diminished his love for the society of his professional brethren, and his attendance at these meetings is far more regular than many of his younger neighbors. We are honored by his presence and benefited by his counsel. Hundreds throughout the land received from his lips their first and lasting inspirations. The echo of his voice, ringing with exalted learning from the platform, in the school or from the bedside in the hospital, still lingers with us. Let us gather around this life, so full of valuable achievements, and, renewing our faith in the fathers of our society, labor still more assiduously in every field, nor cease our efforts till, resting upon the foundation they in their wisdom laid down, there shall be erected

a superstructure that, in all the perfection of its beauty, will be a pride and glory to the founders.

VALEDICTORY ADDRESS.¹

BY WM. E. KIELY, M. D.,
CINCINNATI.

Fellow-Members of the Academy:

During the year of my incumbency as the President of the Academy, a time which I will always associate with pleasant memories, my observation of the workings of the society has necessarily been more or less acute, as the duties of my office demanded, and I, therefore, beg a few moments of your time to point out certain lines upon which we, as a scientific body, should work, in order to further our advancement.

A glance over the records of the past year presents the following facts regarding the roll of the society:

We have elected fifteen new members; there have been two resignations and thirty-eight members dropped, some for non-payment of dues, others having left the city. This leaves a total membership of 327 at the present time.

There has not been a single death among us during the year, which shows how healthy a set of fellows we are, and this fact alone should be an incentive to any self-respecting non-member to immediately seek admission.

The average attendance at meetings has been fifty-four. This small number is not as good a showing as it should be, considering the total membership. The apparent lack of interest may be attributed to many causes—laziness and indifference on the one hand, and on the other the development of a number of smaller medical societies, where a few individuals prefer to air their greatness rather than blend it with the aggregated efforts of the members of a society such as ours, in order to make it a stronger representative body of our profession. These and other well-known causes de-

¹ Delivered before the Academy of Medicine of Cincinnati, March 14, 1898.

tract from the large attendance we should have. As one meeting night succeeds another, the same faces are seen again and again, and it may be added they represent the busiest members of the profession, a fact which does not prevent them from faithful attendance here. Formerly, the absence of a telephone was among the excuses of those who found it more to their liking to be members in name only, but this is no longer tenable. Let us hope that all causes for like pleas will soon be removed, and that the end of the ensuing year will show the largest attendance in the history of the Academy.

At the expiration of the lease of our present quarters, owing to its inability to secure others, the Executive Committee was obliged to re-lease these rooms on the old terms. An attempt was made to obtain some concessions from the Literary Club, but without success. Should not the fact that we are, in a manner, dependent for our shelter, actuate so large a body of medical men to obtain by purchase, lease or otherwise some quarters that we could call our own, suitable for meetings, and open at all times for social intercourse among us? The present stage of the real estate market, the lowest it has reached in the last twenty years, should be an inducement to make this the time to purchase a building adequate for the requirements of the Academy. This can and should be done, and each member should do his part in making this suggestion a reality at an early date.

It is to be deplored that, in a society from which a physician can derive so much benefit, and where the annual fee is so small, that members do not take more pride in paying their dues, and thus abolish the unpleasant task now incumbent on the Financial Secretary of putting into the hands of a collector a list of delinquents, consisting of more than one-half the membership. The commissions that must now be paid out in this way could then go to swell the treasury.

Let me further suggest from my observation of the workings of the Academy that the offices of Corresponding and Financial Secretary be merged with

the work of the Recording Secretary. This would bring him more in touch with the members, enable him to keep an accurate account of their financial standing with the society, and a more correct list of the Academy membership. Let it be expressly understood that in urging this change I am in no way reflecting upon the work of the retiring officers, who have acquitted themselves faithfully and well. The betterment of the society is my only consideration.

The scientific work of the Academy during the year compares favorably with what has been done in the past. The papers and case reports presented have been unusually interesting, and the patients and specimens were, in the main, of a character to reflect credit on the members who were instrumental in bringing them before us.

In order to adjust the complaint made of the lack of opportunity to discuss specimens and interesting cases which are presented on evenings assigned to the reading of regular papers, I would suggest that a written report be submitted to the secretary at the time of presenting the cases. They could then be discussed on the regular case report night.

There is one matter which, in future, will demand as much the serious attention of the Academy as does now the scientific work. I refer to the law regulating the practice of medicine in the State of Ohio. It has been in operation now nearly two years, sufficiently long to demonstrate its workings; and that it is defective in many essential points, and does not meet the requirements, is apparent to any one interested enough to make the observation. Take, as an example, its application in this city. Not one of the brazen quacks who are all around us have been disturbed by it. Individuals without any medical training have been licensed under the ten-year practice clause, on the testimony of a few friends, who have no regard for either honor or principle. It will be only through the well-directed efforts of the various medical societies in the State that an improvement or amendment to this law will be obtained, and with a well-directed effort on our part we can

get such legislation and men to enforce it.

In retiring from the chair let me express my indebtedness to the Secretary, Dr. Schenck, for his ready and able assistance during the year. I also wish to return thanks to each and every member of the Academy for their cordial treatment of me on all occasions, and to assure them that through their courtesy my task has been made an easy and agreeable one; and, confident that the office will become to my successor one of pleasant memory, I recommend him to your kind favor.

"Hydrophobia."

Dr. Irving C. Rosse, the well-known neurologist of Washington, has reached the same conclusion as have many surgeons—that "hydrophobia" is nothing but tetanus (or occasionally some acute inflammatory disease of the cord or meninges). Dr. Rosse is so convinced that there is no such disease as hydrophobia that he has offered over his own signature a reward of \$100, in the interest of science, to any one producing a well-authenticated case of the same in man or dog.—*N. Y. Med. Times.*

Marriage and Lunacy.

In Great Britain (according to the latest report of the Commissioners in Lunacy), at every age, from twenty to sixty five and upward, the chance of a single man going mad is much greater than the chance of a married man going mad. At the age of twenty to twenty-four the "odds" against the single man, as compared with the married man, are $5\frac{1}{2}$ to 1, which looks like a strong argument in favor of early marriages.—*N. Y. Med. Times.*

THE chair of Diseases of the Eye, Ear and Throat at the Medical College of Virginia, made vacant by the death of Professor Charles M. Shields, will be filled at the annual meeting of the Board of Visitors of the college, April 21. All applications, accompanied by credentials, should be forwarded to Christopher Tompkins, M.D., Dean, Richmond, Va.

THE

Cincinnati Lancet-Clinic.


A Weekly Journal of Medicine and Surgery.

ISSUED EVERY SATURDAY.

J. O. CULBERTSON, M.D.,
EDITOR AND PUBLISHER.

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DR. J. C. CULBERTSON,
317 W. SEVENTH ST., CINCINNATI, O.

CINCINNATI, MARCH 26, 1898.

Editorial.

A DISCUSSION.

Some six or seven years ago ethical morals in some quarters became so low that those who were righteously inclined felt that they must have a hearing and air their tribulations before the medical public. To this end and purpose, the *Pittsburg Medical Journal* was established. When the exposition began the Pennsylvania State Medical Society was enlisted, and in due course of time the *Journal* passed into the hands of the Society, and has since been published as the official organ of that association. The standard of the *Journal* has been exceptionally high, and its matter of a superior order.

Pittsburg, however, was not the acknowledged medical centre of the State, and evident envyings arose in the City of Brotherly Love. That good old city was the home of a medical literature of the highest order. Some of its publications were so purely scientific as to abjure the editorial page, which was left without identity or individuality of expression. Clear, cold,

unadulterated science is meaty food, but sometimes clogs the brain and produces stasis where active life should be apparent. To remedy this a weekly was conceived, and after due course of gestation was brought forth. With substantial financial backing, its life was not a very vigorous one. The editorial page showed manifestations of disturbances indicating troubles in both the brain and circulatory forces. The *News* was always clean, prim and contents of typical Quaker tints. Its mathematical exactness was like the virtue of Cæsar's wife, quite beyond question or suspicion. One day a new hand grasped the editorial pen. Strength and vigor were apparent in every sentence. Nonsense was not tolerated even in the shadows of the advertising pages. The editor was on his metal, and every scrawl had a ring in it indicating pure jingle. The unethical were jabbed, stabbed, gibbeted and quartered with skill. Queerly enough, the ethically editorial page did not harmonize with the publisher's department, and a severance took place, the *News* being deported to New York, where the views of the publisher were more in accord with a newly engaged editor.

The forces in Philadelphia which had been eliminated from the *News* were for a period in peaceful abeyance, but in time there came a gathering and getting of themselves together, and a new journal was sent forth in the medical world. Its advent and announcement proclaimed an ethically stalwart publication.

The medical profession of the State of Pennsylvania were now on an evenly balanced teeter-board, the pivot of which was found on the ridge of the Alleghenies, the ends located in Pittsburgh and Philadelphia. The balancing did not continue for any great length of

time. Jostlings, joltings and frictions set the board to wabbling, and presently a to-and-fro motion indicative of a lack of harmony between the guys of the two ends became manifest, which has resulted in charges and counter-charges along fine lines. The Philadelphia journal is less than three months old and the Pennsylvania journal has not completed its first year. Figuratively, both are in long clothes, but their lusty vigor of expression tells of precocity not looked for in those so callow.

Least matters become serious, the caged white-winged messengers of peace should be tipped and loosened from their holdings, and permitted to flutter all along the teeter-board, in order that a proper equilibrium may be maintained.

A HOSPITAL DRUMMER.

LEESBURG, O.

Editor LANCET-CLINIC:

Referring to your editorial in above journal, headed "The Poor," in issue of the 19th inst., the hospital called "Christ's Hospital" sends out a solicitor who lectures for the same and earnestly urges people to go to said hospital. This institution may send out several solicitors, but it is certain that this (Highland) county has been canvassed in detail by a super-annuated preacher, urging all sick Methodists and others to patronize Christ's Hospital. The name of the preacher is Clayton, and he was formerly presiding elder here.

Very truly,

H. A. BEESON.

In the name of all that is good, bad or indifferent, just read over, chew, cogitate, masticate, assimilate, digest and absorb that note from Dr. Beeson. It is a nutritious morsel, but not for the country doctor. For him it means anemia, leucocythemia, paralysis and starvation.

Self-preservation is the first law of nature, and the most powerful of all instincts. The medical profession has

been invaded, and in a way so infamous as to suggest all of the maledictions and anathemas to be found in an unabridged dictionary.

Think for a moment of an ordained minister of the gospel canvassing the sick and afflicted in behalf of a private hospital, bearing the holy name of the Son of God! Judas has a place, and it is not known to be paved with pearls and jasper. Is this man a lineal descendant? If not, he has contracted an infection of type so similar that staining processes and a high-power microscope are necessary to differentiate between the motives of the two creatures. It is the pieces of silver he is after—same old pieces. He is not only betraying Divinity, but a profession whose prototype is the Master himself. Self-preservation will justify extreme measures and action upon the part of the medical profession wherever he may be found. The writer does not know this creature of venality, for which he is thankful. Praise God from whom all blessings flow!

Any and all hospitals are made possible by the medical profession. These institutions have lately taken upon themselves new functions, and from being charities are commercial and manufacturing corporations. Their chief attributes consist of milking and otherwise squeezing the medical profession, all of which is done under the guise of sweet charity. This siren song has been sung in the ears of doctors, preachers and people until many have actually believed in its truth. As commercial enterprises these corporate hospitals are easily understood.

There is another phase, perhaps less recognized, and that is the manufacturing department. Every one of them has a school for training nurses. Presentable, good-looking young women are enlisted

and induced to give a term of personal service. This being done, with much show and ceremony they are graduated, labelled and commissioned to go out into a cold, unsympathetic, unfeeling world to act as drummers. That is the purpose of their training—nothing less and little more. Watch the ordained drummer and he will be found sidling up to the country girls who are plump, pretty and healthy, with a suggestion of cap and surplice as trained nurses, which he tells them is so much easier than work in a farm house, and a whole cart-load of bosh and other nonsense.

Oh, my! Reader, you are weary and tired; so is the writer. And yet there is a little duty which we owe to ourselves individually and to our profession in the name of self-preservation, the echo of which should place some fresh dynamite under the coat-tails of all hospital drummers, regardless of age, sex, color or previous conditions of servitude.

Hereafter, the doctor, country or city located, who sends a patient or recommends one to Christ's Hospital in Cincinnati is recreant to his profession, to his wife and children, and to his own personal respectability. It is suggested that you don't be afraid to say pretty near what you think about the business. As somebody has said, "Hew to the line, let the chips fall where they will."

SWILL-MILK.

This article of diet is the product of cows fed upon swill-slop. The Health Officer says all swill-slop dairies are to be removed from their present habitat to localities outside of the city limits on or before the first of next May. These dairies have been in the past a fruitful source of corruption of city officials. It is a pleasure to say the present Health Officer is not included in this list. The

character of milk produced and sold by these swill-dairies is simply revolting, and yet up to date, until a new board of administration is in the act of making a change, these dealers in poisons and child life have held their own against all comers. A change of administration came none too soon. Dr. Withrow has lent respectability to the Health Office during his brief administration. It is hoped his successor will be in every respect as good a man and official.

THE CINCINNATI HOSPITAL.

The newspapers are actually telling of refusals of patients to the wards of that institution, and word comes that the receiving physician, under instruction, is drawing the lines hard and taut.

* * *

In Albany, New York, the Legislature is considering a bill entitled "An act to provide for the proper labelling of poisonous articles;" also another, "An act in relation to the sale of patent or proprietary medicines." These two acts should be supplemented by another entitled "An act to regulate free clinics, dispensaries and hospitals." Evidently, the people as well as the general medical profession are being aroused to these evils. Amen!

THE RUSH MONUMENT FUND.

Contributions to this laudable object should be numerous. They need not be large except in the aggregate. From every physician of repute there should come a little something, ten or five dollars, two or one, but every one should be identified in this. Five thousand regular physicians in Ohio should contribute any where from five thousand to ten thousand dollars; certainly not one cent less than the former

amount. The work will be done, and well done. Ohio should make a showing away up in the first rank. This is a matter of duty, and should be backed by professional pride and enthusiasm. Dr. E. W. Mitchell, of Cincinnati, is the local treasurer of the fund; Dr. N. R. Coleman, of Columbus, is also local treasurer.

EDITORIAL NOTES.

AMERICAN MEDICAL ASSOCIATION.—The Committee of Arrangements announces that preparations for the coming meetings are well advanced. A large number of prominent men have signified their intention to be present and read papers, and an excellent scientific programme is assured. The indications all point to a large and successful meeting.

Convenient and ample accommodations have been secured for the general sessions, section work, registration and exhibits.

The entertainment of members and their families is being planned on an elaborate scale and the committee promises all who may come a most enjoyable time.

Denver is an interesting city, and the State offers many and varied attractions to visitors.

Local excursions are being arranged to take place after the meeting that all may have ample opportunity of visiting various points of interest in the State and seeing the best scenery of the Rocky Mountains.

The committee confidently expects to obtain a one-half rate and thirty-day limit for the round trip on roads West of Chicago and St. Louis, and reduced rates on Eastern roads.

"ROMANCE OF A HANDSOME COUPLE.—A mild sensation was created at the City Hospital yesterday when a cab dashed up the Twelfth Street entrance and a handsome young man alighted, accompanied by an equally handsome brunette in *rustling silks* and *flashing diamonds*. The young lady was supporting her companion, who seemed to be in a dazed condition and in an ex-

tremely nervous state. When the couple reached the office the lady asked that the gentleman be assigned to a private room in A Ward and a physician called at once. By this time the gentleman was on the verge of a collapse, and in a few minutes afterward the doctor found him on the verge of delirium. He was placed under the influence of a powerful opiate and soon fell into a heavy torpor. After the excitement had subsided the young lady volunteered the information that the sick man was Virgil Woods, a son of Mr. R. P. Woods, manager of the Manhattan Life Insurance Company of New York, for the Southern District of Ohio, and that she would be responsible for all charges.

"The second act in the little drama was enacted later in the day when an aunt of the patient called, after having been apprised of her nephew's condition. At the time the fair girl was tenderly stroking the brow of the object of her solicitude, but when notified that an elderly lady wished to see the young man she beat a precipitate retreat and sought refuge in an adjoining room.

"The father is at present in New York and unaware of the son's condition."

The above is a sample newspaper notice, showing one of the uses to which the Cincinnati Hospital is put. There is money in such cases for somebody.

ACADEMY OF MEDICINE.—Regular meeting, March 28: Case reports with discussion. Annual dues are now payable. Telephone 1981.

A BOARD of medical officers, to consist of Colonel Dallas Bache, assistant surgeon-general; Major Walter Reed, surgeon; Major James C. Merrill, surgeon; Captain William H. Arthur, assistant surgeon; First Lieutenant Alexander N. Stark, assistant surgeon, is constituted to meet at the Army Medical Museum Building, Baltimore, on Monday, May 2, 1898, at 10 o'clock A. M., for the examination of candidates for admission to the Medical Corps of the Army.

Correspondence.

FEEs FOR ATTENDING PAUPERS.

TUPPERS PLAINS, O.

Editor LANCET-CLINIC:

I ask your support for the bill that was introduced by Senator Smalley. It provides that doctors shall receive the same fees for attending paupers as they do for attending patients. I have a petition and it is being signed by all to urge our representative to work and do all in his power for the bill. I ask you to urge all the doctors to do likewise. We are a great army, and if all will work for it there will be no reason for failure. Let every physician get to work so we can have some protection. The way the law is it leaves it all in the hands of the trustees of the township. The law says that after being called to see a pauper you shall report the case inside of three days to the trustees of the township, and then you shall receive a reasonable compensation. You see that is leaving everything in the hands of township trustees.

I have had some great experiences in that line. I am in a neighborhood where I get \$2.00 per visit, where in case of a pauper in same neighborhood I only receive \$1.50. They say that is reasonable compensation. It was too reasonable for a poor doctor. Then what is left for me to do? I hear one say, I would collect it by law. Very well. You all know routine doctors have no money to experiment in law, and the township trustees are not using their own money, but township funds, and as a general thing are more free to defend themselves with it, and the way the law is now it has been ruled by Justices of the Peace that whatever the trustees of the township say, that is reasonable compensation.

S. P. DEAMS, M.D.

DIPHTHERIA AND TUBERCULOSIS.

CHRISTIANSBURG, O., }
March 9, 1898. }

Editor LANCET-CLINIC:

I want to say in reference to the discovery of the diphtheria bacillus as of comparatively recent origin, that Professor Bartholow twenty-five years ago gave to us the following definition: "Diphtheria is caused by a micrococcus, a round cell vegetable parasite." So you see years before the announcement of the Klebe-Löffler as being the origin of diphtheria, Professor Bartholow was not far from the truth.

Again, we are hearing much about the contagiousness of "tuberculosis." The doctrine is *not* new. Professor Whittaker taught it twenty-three years ago. I simply mention these points as a reminder that all progress and discoveries do not originate beyond the "deep blue sea."

Very sincerely yours,
B. F. ZELLER, M.D.

Translations.

NOTES ON THE HISTORY OF MEDICINE.

TRANSLATED FROM DE BORDEU.

BY THOMAS C. MINOR, M D.,
CINCINNATI.

SECTION III.

Opinion of Huarte on the Later Jewish Medicine—The Natural Disposition of the Jew for the Healing Art—King Francis I Favored Jewish Physicians—Jewish Medical Authors and Their Dissensions with Christian Doctors.

Huarte, a philosophic physician, has discussed of the natural disposition of the Jew for medicine. Huarte's work is full of singular reflections and very delicate views. Huarte has been read but little; it seems he should merit a more ample commentary. That found therein on the subject of Jewish doctors furnishes us material for reflection on this race of physicians. Let us speak now of the more modern Jewish doctors, or those who up to late centuries practiced medicine among Christians. Huarte claimed that the Jews were better practitioners of the healing art than many natives of Spain or other portions of Europe.

"It was only Egypt that engendered in its inhabitants the manner of imagination proper to medicine, and which comes by a degree of warmth less than of imagination by which verses and couplets are made, for those I consider good practitioners of medicine are all a little given to versification; yet their poetry is not marvellous. Medicine and all the other sciences that belong to the imagination were invented in Egypt, like mathematics, arithmetic, astrology, perspective and real laws.

"Now, if I prove the children of Israel lived many years in Egypt, and if, on their departure, they had the proper nourishment for the imagination necessary for medicine, it would only further establish my opinion, and we would know also in the same way what

minds might be elected among us for medicine.

"The sojourn of the people of Israel in Egypt is known to all the world; besides, the lands over which this people traveled was not so different nor so remote from Egyptian qualities. We see, after they left Egypt and wandered out in the desert, what food they ate, what waters they drank, to the end of understanding whether it changed their mental qualities after they left captivity.

"God nourished this people with manna, which is the most delicate food ever eaten by mankind. However, the Hebrews grew weary of this delicacy, and said thus: 'Our stomachs can no longer tolerate this light diet.' The philosophy of this was that they had strong stomachs; they could eat garlic, onions and gamey flesh. So that when they came to eat a food of such lightness as manna they indulged in anger; for they had grown to be marvellously dried up and thin. They drank the most delicate water, too, water from desert springs that burst forth fresh, clear, sparkling, and perfectly pure. All this made their imagination very acute.

"Being in the Land of Promise, with such subtle minds, these people had many injuries and adversities, so that what they had drawn in from Egypt and the desert gave them a dry and lean appearance, for they had led a poor and sad life indeed. I have before said that their anger was really their instrument of industry, cunning, craft, and malice, all of which accommodate themselves to the conjectures of medicine, and by means of which one knows diseases, their causes and the remedies to apply."

Huarte concludes from all his reasonings that the Jews had particular predispositions for the healing art, and agrees: "It is very true that the Jews are now as acute and subtle as they were a thousand years ago; but we cannot deny," adds he, "they are not always so; it is necessary to confess that they have entirely lost their natural skill."

Huarte founds his opinion princi-

pally upon a fact that merits reporting, and which constitutes an interesting anecdote in medicine:

"The magnanimous and very Christian Francois de Valois, King of France, distressed by a chronic malady, seeing that the physicians of his Court and household gave him no relief, while all the time his fever increased, said it was not possible for his Christian doctors to cure him. From whence, growing angry, seeing himself always full of fever, he sent a courier into Spain to the Emperor Charles Quint, praying that he send him a Jewish doctor, the best in his Court. The latter Emperor sought such a doctor in and out of his realm, and could find none; but sent instead a *new Christian*, who shortly appeared before the King of France, and the following very gracious interview occurred:

"The King asked him if he were not yet awaiting the Messiah promised by the Jewish law. 'Sire,' responded the doctor, 'I do not wait for the Messiah promised by the Jewish law.' The King replied: 'You are wise in that.' But the doctor continued: 'We Christians know that the signs noted in the Holy Scriptures are accomplished.' Then the King exclaimed: 'You are, then, a Christian?' To which the physician replied: 'Yes, sire.' Then the King said: 'Since this is so, return to your own country as quickly as possible, for I have a Court full of great Christian doctors. I wish a Jew, for they only are the ones who have a natural taste to practice medicine and cure.' Therewith he sent him out, without allowing his Royal pulse to be felt, and never showing the doctor his urine. Then he sent to Constantinople for a Jewish physician, who cured him *with asses' milk*."

It is doubtful whether the medical historian of King Francois' Court ever mentioned this fact; it would be well to have some of the proofs of their conduct *vis-a-vis* to the Jewish doctor from Constantinople, as well as the physician from Spain. We have seen no work or pamphlet of that day that gives any account of their bad humor; we think they did not unite to destroy the new-

comer, who, after all, practiced the same profession as themselves, and whom it was necessary to treat with generosity. Drs. Borges, Miron, Cap, and other physicians to the Court of Francois I have left behind them well-established reputations, so that we cannot think they did anything dishonorable against foreign physicians. There are no lines, no bitter criticism, no satirical dissertations, no partisan works; they were too wise to speak injuries, that all the world would have taken for a violent fit of anger and jealousy, that might have at the same time left an indelible stain on their memories.

Whatever may be the foundation for Huarte's anecdote, it indicates that in his time the memory of several Jewish physicians was well preserved. History mentions a Saragnia of the seventh century, several Dr. Isaacs, a Rabbi Juda, who, a Jew, joined the Mohammedans about the twelfth century; of a Yusiif, who lived about the same time, and who formed, with one of his friends, the singular project of returning, after his death, to give news of the other world; of a Moses, who was one of the greatest doctors of the twelfth century; of a Jacques; of a David; of Amatus and Zacutus, more recent Jewish physicians of Portugal, who left excellent works on medicine behind them.

We know by the testament of Isaac, a Jewish doctor of Carcanonne, of August 4, 1305, that these people were allowed to hold land and practice medicine in that province. Isaac made Vital, his son, his heir, and gave legacies to Astina and the children of Astina, a physician, another son.

There are many other proofs of the Jews having the custom of following the profession of medicine during the early ages, after the empire of the Arabs in medicine was over, and when that of the more modern medical faculties commenced. Councils held at Beziers and at Toulouse during the thirteenth century, and at Ariznon during the fourteenth century, "*excommunicate all Christians who resort to Jews for the treatment of their diseases.*"

We can easily believe that the supporters of the University of Montpellier

and Toulouse contributed not a little to excite the vigilance of the fathers of the church. These abbottors were all ecclesiastics, and held positions in the councils. They sought in all possible ways to take the practice of medicine away from the Jews. Those who called in Hebrew doctors were excommunicated, a proof of how important they were, at the same time how the faithful admired the child of Israel in medicine.

There were then in these past ages every evidence of the dispute between Christian and Jewish doctors on the subject of medicine. The zeal of the Christian doctors of those days was extremely severe; they endeavored at a council in Salerno to prevent Hebrews from practicing physic; this was one of the very centres of Arabic medicine, too. The books of that day are full of slander against the Jewish physicians; they were classed as charlatans and enemies come to carry off the medical domain. One of the doctors of that period says with an air of disdain: "It is sufficient to be a Jew in order to be a good physician." Finally, it is claimed one of the decrees of the Faculty of Paris in the thirteenth century proclaimed: "We forbid all Jews and Jewesses to practice medicine among those of the Catholic faith."

The councils had forbidden the faithful all commerce with the Jews, and the Faculty of Paris addressed them, even forbidding them to follow medicine. Yet this repression was not conceived in such a manner as to prevent Jewish physicians to practice among the sick of their own sect, as the councils did not advise such patients to be deprived of medical attendance, and those of the Faculty of Paris did not assume to take charge of such cases alone.

Yet charity was not wholly extinguished as regarded the Jews, since the councils and Faculty did not forbid Christian doctors from curing Hebrews who might become ill; but these laws were principally for the benefit of Christian physicians; the principal object was to make Arabian medicine obsolete and drive out the Hebrew practitioner. The Christian doctors, meantime, had no other resources save Pagan

writers and the works of Arabs and Jews; they explained this, in fact, to their pupils. Since the first centuries of the church Christianity counted only its martyrs and confessors, and there had been but few medical authors among Christians.

The Jews reproached the Christians, there is good reason to believe, more than once, recalling to mind the fact that medicine had been preserved by them and not by the Christians. It is sad to think the latter members of the Faculty should have incurred these reproaches, and been obliged to invoke the authority of religious councils and Kings to establish a Christian medical empire. It would have been better had history proved that university physicians should have been superior to all others, and that Jewish people themselves had preferred Christian practitioners of the healing art; yet there remains a great number of presumptions to the contrary. Witness the action of Francis I, who never became King until sustained by a powerful party in his realm.

The King's opinion, too, was not without foundation, and the employment of Jewish doctors was based on specious reasons, if we are to believe Huarte, for has he not remarked: "Those who lived in servitude, in sadness, in a foreign land, engendered much wrath, as they had no liberty to spread nor to avenge the wrongs they had suffered, and this is the reason they were fit instruments for craft and cunning, industry and malice, all of which are necessary to the conjectures of the healing art."

There never was a people in such a convenient position to cultivate medicine as were the Jews, spread throughout the realm, in the century mentioned. Persecuted and pursued on all hands and in every manner, all the world struck at them, following the examples of Royal authority, which doubtless had reason to complain of them, and the example of the church, that did not like them. Under such circumstances the universities believed everything allowable.

The cry of the world was the cry

against the Jew; they were then forced to do their best in the minds of the people; medicine furnished them an honest pretext, because, on one side, Royal and ecclesiastical power could not entirely condemn the application of the Jews to medicine, and that the supporter of the universities had a too marked influence to take from the chosen people the practice of the medical art without all the world perceiving that motives of rivalry induced the act, and would diminish, in proportion, the legitimacy of their conduct towards the Israelites.

It is difficult to perceive how faculties should have even been induced to prevent the practice of the art by Jews among Christians; it is even more difficult to perceive the motives that induced historians in love with these same faculties to expose to the public eye, and at such a recent period, the decree which we have noted, and which would remain for a long time still hidden in ancient registers.

Would any one wish to see those barbarous days return, when they endeavored to oppress liberty and the confidence of citizens, even going further than legitimate authority, that has always known how to relax its laws on the subject of medicine when the good of the people required it? To forbid Jews from practicing medicine in favor of Gentile doctors was to interdict these same people from the means of earning a living; it oppressed, too, the liberty of the Gentile masses by forcing them to employ only Christian doctors.

The prince ordered it, the discipline of the church was conformed to the will of the prince, perhaps; but what need had the prince and the church to leave the application of the Medical Faculty? Did the members of the latter not feel some little scruples at having cried aloud to all the world: "You are forbidden to go to any but to us in order to be treated!"

What could those to whom this order addressed reply? "You wish to cure us by force. Where did you learn the profession you follow? Was it not from the works of the Arabs and Jews

that you wish us to forget? Their children, without doubt better instructed than you in the tongues and ideas of their fathers, live among us, and possess our confidence in all that regards our health; that is to say, the one thing for which in this world we should enjoy most liberty? Do better than the Jewish doctors, be wiser than they are; but do not imagine that you have the right to tyrannize over us; do not believe you can make yourselves preferable to them by destroying them, by trying to take away their daily bread and forcing us to divide with you the bread you wish to divide with them."

Besides all this, the Jews enjoyed some advantages over Christians; they were the masters of commerce; they travelled more than the natives of any country; they had relation with the Orient and Spain, that was the centre of Arabic medicine; they spoke all foreign languages; they sought out in Greece and in the *débris* of the Roman Empire all the ancient manuscripts; they knew where to find good medicine and to receive them. All these prerogatives and particular qualities put the Jews in possession of the principal branches of medicine. In making branches of commerce they debarred medicine, doubtless; it became the natural object of their love of gain; they were following their principles, and speculative merchants, so to speak, obliged to get rid of their things and continue their sales with their profits. It is only in this regard that some, but not all, Jews may be reproached with many formal systems to deceive. It is not impossible to imagine that a passionate Gentile has advanced the idea that the Jews had resolved to undo the Christians under the pretext that the former had a special adaptation for medicine. This reflection is embittered, and is only an injury said in the flesh or born in the shadows of libraries of old books, from whence a doctor with zeal in the belief, but in bad taste, has sought to reform the world.

We agree with Huarte that the Jews were amply provided with all he claimed, whatever may have been the cause. We see in them a natural

disposition for medicine and a love and tendency for commerce, and all the details it involves. It is by virtue of this disposition that the Jews find means to insinuate themselves with the masses of the people and among the great, and receive their titles as doctors of medicine; those Jews entering the profession counterbalance the Christians as doctors. For those who wish to inquire further, the work of Joubert, "Popular Errors," written in the sixteenth century, may be useful.

[TO BE CONTINUED.]

Acne Rosacea Treated by Intradermal Injections of Formaldehyde.

J. T. McShane (*Journal of the American Medical Association*, December 18, 1897) describes the case of an unmarried woman, thirty years of age, who had suffered from acne rosacea with pustulation and papulation for about ten years. The entire face was involved, with redness most marked over cheeks and nose, and always worse during menstruation. The patient was well nourished, but had suffered from nervousness and despondency, perhaps due largely to her necessary isolation from society on account of the bad appearance of her face. Treatment had been futile.

The author used intradermal injections of formaldehyde in the strength of one drop of the 40-per-cent. solution to 100 drops of water. These injections were attended with a stinging pain which the patient compared to the sting of a bee. One-half to one minim was injected in each point selected, care being taken to pass the needle into but not under the skin. In a few moments a spot about the size of a ten-cent piece, immediately surrounding the point, presented an elevated surface resembling urticaria. A sufficient number of injections were made at each treatment to thus affect the whole area of the disease. The treatments were repeated at intervals of one week. The results have been most gratifying, and after three months' observation and treatment the face is normally white, with little or no tendency to recurrence of the disease.—*Medicine.*

Bibliography.

THE BULLETIN OF THE OHIO HOSPITAL FOR EPILEPTICS. January, 1898.

The hospital at Gallipolis, with its immense number of cases to draw from, has of late become of practical value for pathological study. A large laboratory has been thoroughly equipped with everything necessary for pathological and bacteriological investigation, and is under the able direction of Dr. A. P. Ohlmacher. The line of work to be followed is the study of macroscopic and microscopic pathology, bacteriology, chemical-pathology, and the various investigations in such clinical and therapeutic directions as the material that presents itself may suggest. It is the intention of the board of managers that the results of such work shall be published in the various medical journals in order to insure a more general circulation, and then collected in the form of reprints, which, with other original matter, will be presented in bulletins such as the present one, to be issued whenever sufficient material shall have been collected. If the bulletin at hand is any criterion as to what future numbers will be, the pathologists will soon be impatient for more frequent issues, for the present number is a model as to how cases, especially pathological cases, should be reported. Most of the work has been done by the laboratory director, and special attention is called to his article on "The Bacterium Vulgare in a Case of Cerebellar Abscess Following Middle-Ear Disease." While the protean group is not infrequently found in pus collections in other parts of the body, it is the second case of which we have any authentic record in which it has been found in the brain.

M. A. B.

A TEXT-BOOK ON SURGERY, GENERAL, OPERATIVE AND MECHANICAL.

By JOHN A. WYETH, M.D. Third edition New York: D. Appleton & Co., 1898.

This is certainly a magnificent work, and reflects credit not only upon the author, but upon American surgery.

Since the issuance of the last edition, in 1890, there have been many improvements in operative technique. In order to introduce these the author has carefully eliminated unnecessary matter, and thereby keeps the volume at a reasonable size. The magnificent original illustrations remain, to which two hundred new ones of value have been added. The work is simply great, and a copy should be in the hands of every physician who practices surgery.

TWENTIETH CENTURY PRACTICE: An International Encyclopedia of Modern Medical Science.

By leading authorities of Europe and America. Edited by THOMAS L. STEDMAN, M.D., New York City. In twenty volumes. Volume XII, "Mental Diseases, Childhood and Old Age." New York: Wm. Wood & Co., 1897.

The contributors to Volume XII are among the most noted writers of the world in medicine. The galaxy is made up of J. Boy-Tessier, of Marseilles, France, who writes on the mental diseases of old age; Dr. J. F. Blandford, of London, has an extensive article on insanity, in which he takes up the etiology, morbid anatomy, symptoms and classification of mental disorders of this character; Dr. Jules Comby, of Paris, France, on mental diseases of children; Cesare Lombroso, of Turin, an article on criminal anthropology, that is of great interest. It is a summary of the extensive writings of this eminent author upon this subject. Paul A. Sollier, of Paris, France, contributes an article on idiocy. Altogether this is certainly a remarkable volume, in the extent and character of its contents.

THE SURGICAL COMPLICATIONS AND SEQUELS OF TYPHOID FEVER.

By W. W. KEEN, M. D. Based upon tables of 1,700 cases compiled by the author and T. S. Westcott, M.D. With a chapter on the ocular complications of typhoid fever by G. E. DE SCHWEINITZ. Philadelphia: W. B. Saunders, 1898.

This is a book full of fascination from cover to cover. The author tells of his change of view in regard to the cause of pathological lesions found elsewhere

than in the alimentary canal in cases of typhoid fever, and announces the new pathology. Instead of clots being causes of damage, he attributes the troubles to the typhoid bacillus. Referring to typhoid gangrene, affections of the joints, bones, abscesses, hematoma, cerebral complications, otitis media, parotitis, affections of the thyroid gland, larynx, pleura, lungs and heart, esophagus and stomach, liver, gall-bladder, spleen, sexual organs. In fact, the specific poison is shown to affect the entire physical organism, and to be responsible for specific pathological lesions. This is one of the books that should be in the hands of every physician and surgeon.

ORTHOPEDIC SURGERY.

By JAMES E. MOORE, M.D., with 177 illustrations. Philadelphia: W. B. Saunders, 1898.

This is a cleverly written monograph, in which the author clearly outlines the purpose of orthopedic surgery and produces a reflection of the observations of himself and others. In the book are many suggestions which may be utilized to advantage by all general practitioners of medicine, as well as by those who make a specialty of surgical work. Much space is given to prophylactic work in surgery, which is making advances similar to those in medicine. It is a pleasure to commend the work to the attention of all physicians.

DISEASES OF WOMEN: A Clinical Guide to Their Diagnosis and Treatment.

By GEORGE ERNEST HERMAN, M.B. Lond. With 252 illustrations. New York: William Wood & Co., 1898.

This work may very well be classed as an elementary one, through the simplicity of expression used by the author, for which reason it is particularly useful for students. For the same reason it is well adapted to the necessities of physicians who do not make a specialty of diseases peculiar to women. Such subjects as headache, chronic abdominal pain, and methods of investigation are lucidly treated in separate chapters; after which come parts devoted to pelvic pains and inflammations, hemor-

rhage, leucorrhæas, disorders of the vulva, of menstruation, the sexual functions and abdominal tumors. In each instance where it is possible excellent illustrations are introduced.

TREATISE ON THE DISEASES OF WOMEN:

By ALEXANDER J. C. SKENE, M.D. Third edition, revised and enlarged, with 290 engravings and four plates in colors. New York: D. Appleton & Co.

This work by Dr. Skene was so favorably received by physicians as to make it familiar to all who give special attention to gynecology. During the six years since the last edition there have been many advances, and no one has done more to further the work than the worthy author. Here he reflects the work he has done, and tells of knowledge gained by experience. Special attention is given to the uses of electricity in new and varied forms. In this alone he makes a valuable contribution. The use of the endoscope and cystoscope is well described and illustrated.

THE AMERICAN YEAR-BOOK OF MEDICINE AND SURGERY.

Collected and arranged with critical editorial comments by many of the leading medical writers of this country, under the general editorial charge of GEORGE M. GOULD, M.D. Illustrated. Philadelphia: W. B. Saunders, 1898.

This is the continuation of an immense work undertaken by that prince of collators, Dr. Geo. M. Gould. Every subject seems to have been gleaned and garnered. That some have been omitted is quite probable, and yet the pith and gist of professional progress in the year that is past may be found in this colossal work. To the publishers as well as editor much credit is due for the handsome way in which the volume is issued. As works of easy reference these year-books are certainly a great convenience.

TRANSACTIONS OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA. Third Series. Volume XIX. 1897.

This volume is constituted of a series of excellent papers with discus-

sions, some of which are notable, as the one by Dr. C. W. Dulles, in which the author labors hard in an endeavor to prove that tuberculosis is not a contagious disease; another by Drs. S. Weir Mitchell and J. H. W. Rhein on motor symptoms of chorea; hemiplegia in acute lead poisoning, by Dr. J. M. Da Costa, and others of interest.

Some Considerations of Abdominal Incisions.

Woolsey (*Annals of Surgery*, January, 1898), in studying this subject, emphasizes the following conclusions as among those which may be drawn from his considerations:

1. That abdominal incisions, except those in or close to the median line, should be obliquely transverse in order to parallel the nerves (and thereby also the cleavage lines of the skin), so as to avoid partial paralysis of the muscles, weakness of the abdominal wall, and a tendency to hernia.

2. That inter-muscular or even trans-muscular incisions should be preferred to those in the linea alba or semilunaris, for in both the latter cases the cicatrix is less strong and more prone to hernia, and in the semilunar line the nerves are necessarily divided.

3. That in place of the median vertical incision near the inner margin of the rectus, the trap-door incision around this inner margin offers many important advantages.—*Therapeutic Gazette*.

Shock.

It is an established fact in surgery that profound and even fatal shock may be caused simply by mental impression. Desault relates a case in which he was about to perform an operation for lithotomy, and in showing the class where he was going to make the incision he merely traced a line with his finger-nail, and the patient, under the impression that a cut was being made, expired from shock.—*N. Y. Med. Times*.

WOUNDS about the face may be closed by a subcutaneous ligature, and thus render a scar less likely.—*Med. Summary*.

THE
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Whole Volume LXXIX.

Original Articles.

ICHTHYOSIS.¹

BY LOUIS A. MOLONY, M.D.,
CINCINNATI.

The patient which it is my pleasure to present before this Academy is not unfamiliar to a number of the gentlemen present this evening, as she has been an inmate of several of the eleemosynary institutions of this city, where she has in past years been more or less under observation and treatment.

If I enter into somewhat of a lengthy dissertation upon her affection, and transcend the bounds of originality in an effort, which I trust may not prove altogether futile, to give the latest observations upon this wonderful condition, it is also my wish that you bear patiently with me throughout, when we may together felicitate ourselves with the thought, *finis coronat opus!*

DEFINITION.

Ichthyosis is a congenital deformity and hypertrophy of the skin, which may show hereditary tendencies, with a primary development and possibly later exacerbations, rather of degree than of kind, and especially involving the epidermic and fatty elements of the skin, which is characterized by a particular dryness and roughness of the surface.

DIVISIONS.

From the early appearances of this condition in comparison with possible subsequent revelations, the disease has been divided into the two general sub-

divisions, known respectively as *Ichthyosis Simplex* and *Ichthyosis Hystrix*, which will be described later. This, however, is rather a refinement, and the single designating term of "Ichthyosis" is more *apropos*. From the scaly condition observed in the *simplex* form, the name has been commonly applied of "fish-scale disease" or "snake-skin disease," and other multitudinous epithets, similarly of a descriptive character, even being likened to the bark of a tree.

ETIOLOGY.

That this affection is congenital, there remains, I believe, little doubt, and while we may not all be "impressionists," or of that school, the following history of this case, as related by the child's mother, certainly has its unique features:

Family and Congenital History.—

The patient, Rosa G——, female, was born thirteen years ago, April next, at or near Stepstone Station, Pendleton County, Kentucky, and is the second child. The father, who was a healthy farmer, is now dead, but was at no time known to be similarly afflicted. The mother, at that time twenty-six years of age, had always been in fair physical condition up to shortly within the time of her first confinement, when she vomited blood upon a single occasion, and was told by her physician that she had consumption.

Upon the occasion of her second pregnancy, the period of gestation of our patient, in reply to my question as to anything that *she* believed might have influenced this phenomenal deformity, the mother affirmatively answered that she not only became excessively fond of salt pork, which, after the rural custom, was packed in strong domestic brine, but that any saline

¹ Case reported to the Academy of Medicine of Cincinnati, January 31, 1898.

article of diet was especially agreeable to her.

Further, she relates, uninfluenced by any leading interrogatories, that reptiles were abundant in the locality, and she has often queried whether or not one particular blacksnake, of which she stood *in terrorem*, was not influential in causing this anomaly.

This snake, she asserts, was accustomed to crawl daily upon the porch until she became habituated to its presence, and expected to see it there about a certain time. Whenever she opened the door, however, it promptly uncoiled itself, and quickly glided away under the porch, without attempting to harm her.

When the period of *accouchement* arrived, the labor was of short duration, and the mother relates that her early pains seemed so inconsequential that, if they existed at all, she was not awakened by them, and when she finally became aroused to the situation her husband was hastily dispatched for the family physician. In the meantime the membranes ruptured, the *liquor amnii* gushed forth, and with three or four effectual pains, and alone in the room, the babe was born, and found lying in the bed when the doctor arrived, half an hour after its surreptitious advent into the world.

Post-Natal Appearance.—Nothing was noticed particularly by the mother that night, and no one at the time afforded her any information about the child. The following morning she observed it presented a uniform appearance as if it had been scalded.

As the child, although not more cross or fretful than children often are, cried and rubbed its tiny limbs together, the epidermis peeled off and the raw, denuded surface was exposed.

Substituted for the skin in the course of a few hours were multiple blisters, which were also to be seen, *ab initio*, upon the oral and lingual mucosa. These latter soon dried up and did not reappear. Elsewhere the blisters likewise dried up and disappeared, only to again reappear, and again dry up and vanish. This condition of affairs persisted for something over a week, when a charac-

teristic, dry sclerotic condition of the surface asserted itself, and this becoming intensified, minute cracks and fissures soon became numerous and multiplied intensely.

This incipient stage of the *simplex* form was superseded by a desquamation—the condition which has obtained for it a classification among the *squamæ*—at which period the scales would become detached and admitted of being brushed off or removed upon application of a suitable emollient. This condition became first noticeable following blisters which occupied the fingers, and did not even permit closure of the diminutive fists or the bringing together of the slight fingers. Later the sclerotic involvement became both palpable and perceptible under the abdominal bandage and extending around posteriorly. Upon removal of this band an abundant desquamation became readily apparent.

In general it may be said of the typical cases that their existence is by no means an inflammation, but is attributable to anomalous conditions within the sweat and sebaceous glands, together with an epidermal hypertrophy and disposition to a keratosis, as will be dwelt upon hereafter.

Heredity.—While doubtless congenital, numerous unquestionable evidences lead us to believe, too, that heredity is not to be assigned a minor rôle in the etiology, and that one or more members of a family may be similarly affected to a greater or less degree, as in the remarkable Lambert brothers of the early part of this century, described as the “porcupine men” from the remarkable *hystrioidæ* or spine-like processes of this epidermal malformation. An example may also be remarked in the sister of this child, and whose affection is not so extensive, being locally of the same type, and confined to the scalp.

Atavism.—Atavism may be another peculiar assertion of this disease, where, strangely enough, an intermediate generation may experience immunity.

Case Reports.—A report¹ of three cases in one family showed the father, mother and four children affected. Three of the younger children were stated to be but slightly afflicted, while an addi-

tional child, whom the mother stated possessed similar markings, did not survive.

A child was reported³ three years ago in Missouri who possessed a congenital red spot, about the size of a man's thumb-nail, on the outer surface of the leg about midway between the knee and ankle. This served as a focus for the ultimate extension of the disease over the entire body.

Quite an interesting case⁴ was the one reported in a metropolitan journal a few years since. The child at the time of presentation was fourteen months old, and its misfortune was congenital. The babe, premature at seven months, was expelled after four days' labor, during which period every pain was accompanied with gushes of fluid at half-hour intervals, the dribbling between pains being constant. Upon the rupturing of the membranes, it was estimated that about two gallons of water escaped. When born the child presented a ghastly appearance, and was perfectly dry, with nostrils closed and mouth and eyes open, apparently rigid. To instigate respiration, the attending physician was compelled to make an incision into each nostril through which the child might breathe. This child lived quite a time, but finally succumbed to an intercurrent bronchitis.

Another writer⁴ cites an instance of an ichthyotic patient marrying his own cousin, and their progeny enjoying immunity. In this instance neither the couple's parents nor grandparents afforded any claims upon heredity.

Collateral Relations.—Further than the atavism manifested in this disease, it has been asserted that it may appear in collateral branches of a family tree, as in the case just cited.

Thost likewise gives an instance where ichthyosis occurred in four generations. In this family the first ancestor had five male children affected, and one girl and boy each who escaped. Of those affected, one subsequently had five children, three males of these showing the anomaly, and a male and female immune. Another brother of the second generation had five male and three female children, and of these there were

afflicted four sons and two daughters. One of these latter, representing the third generation, had four children, three girls and a boy, the son alone not being affected. In all these progeny, the affection primarily manifested itself a few weeks after birth in the form of a roughness of the palmar and plantar surfaces.

Time of Appearance.—When not developed in *utero*, manifestations may appear any time within the year, but may be deferred until after the twelfth month, but the affection seldom fails to assert itself before the second year. From the time of definite onset, however, the disease is usually progressive until the fourteenth year, by which time, as a rule, it has attained its maximum development, and is usually stationary, or undergoes moderation.

Fifteen cases collected from the *Guy's Hospital Reports*, London,⁴ and other sources, showed the time of appearance in these patients, eleven of whom were under eighteen, and the remainder between twenty-one and thirty years. Of the latter, however, one was a case of ichthyosis, or *tylosis* of the palms, and a similar condition affected a brother and sister. So far as known, the condition was not hereditary.

Frequency.—The frequency⁴ of this disease is given at 0.249.

Sex.—There is little partiality shown in this malformation as to sex, both being affected about alike, although one writer⁴ asserts that either all the children of an ichthyotic parentage suffer from the malady, or only some of same or opposite sex. A case in bearing is that of a mother and five sons afflicted, while three daughters escaped.

Intermarriage, Etc.—Fox⁸ intimates that possible transmission may in the future career of these patients have to be pointed out as an obstacle to marriage.

Endemic.—Claim has been made for the endemicity of this hyperplastic condition in the Molucca group of the Asiatic Archipelago, but as the Spice Islands are only part of this incompletely submerged isthmus, it is far more likely that it is effected by the operation of the laws of heredity, with intermarriage,⁴ of greater force, per-

chance, by reason of their innocuous desuetude.

Climate and Season.—It is known, however, that a cold climate will aggravate the deformity to a marked degree, especially the winter season in this latitude. This is because the patients, who are usually thin, are very sensitive to thermal variations, particularly the severe or windy conditions prevailing in the early months of the year, the skin of these subjects being very irritable, tender, and readily cracking, as a rule.

That the latter is true is singularly made apparent by the itching the patient—who is bright and intelligent, considering the few opportunities afforded her—complains of, and which frequently necessitates a vigorous scratching during the “wee sma’ hours,” when the bed warmth has in a measure affected the cutaneous surface.

In some instances this affection may disappear during the summer, especially when of a strictly local nature, and may return the ensuing autumn.

Intercurrent Disease.—As to the general health of these patients, observers differ. In this patient, two years ago, physical examination was negative. Examination at the present time develops a strumous condition, and the mother further informs me that her daughter has only recently commenced to cough at nights.

Cases have been temporarily benefited by some of the acute febrile exanthemata, as variola, in one instance not reasserting itself for several months.

Sociological.—Neither social status, method of life, nor improper attention during infancy can be assigned as a remote, predisposing or exciting cause of this trouble.

Structural, Organic and Functional.—Despite efforts to show malnutrition and other sources of organic perversion, we are inclined to believe the condition a structural dystrophy resulting in organic impairment, and consequent functional derangement of the eliminative process, with epidermal involvement.

Nervous.—As will be seen presently, some cases have, like zoster, suggested from their adherence to the intercostal regions an occasional neuritis. A num-

ber of these patients have also shown more or less pigmentation of the affected areas. The discussion of this we will pass over for the present.

PATHOLOGY AND SYMPTOMATOLOGY.

Anomalies of Fat Secretion.—Before continuing, a brief recapitulation of some of the essential anomalies of the fat secretion, together with a slight allusion to the histology of the glandular tissues involved, may not prove altogether unavailing, if taken, *in toto*, with their physiological functions.

The fat, which, as we are well aware, subsequently serves as a skin and hair lubricant, is not produced in a manner identical with the sudoriparous function of the coil glands.

The sweat is emitted from the minute vessels of the papillary body and the sweat-gland, or else is secreted by the cells of the latter, and normally appears upon the skin surface as the physiological product.

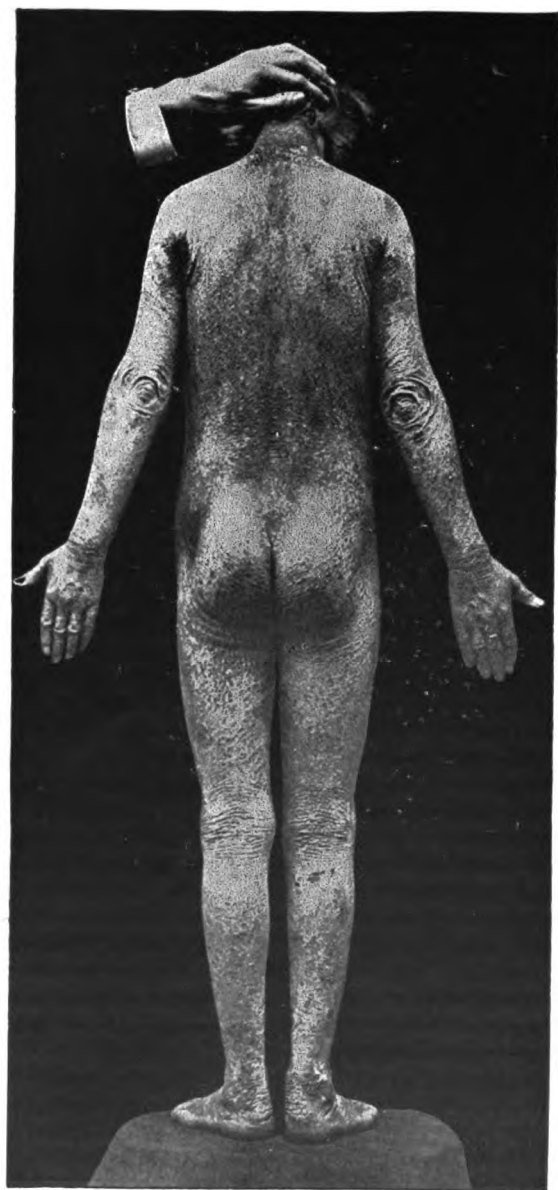
But in the sebaceous glands quite a different process occurs, and is brought about in a manner somewhat as follows: As in the *rete* the epidermis is constantly regenerated by a substratum of cellular proliferation, so within the sebaceous glands there is upon the interior walls a more or less constant maturing of the epidermal cells which line the lobules. These gradually pass from the lumen of the individual lobules toward the orifice of the *ductus communis*, during which period a part of the intercellular protoplasm becomes converted into adipose, while the cell-walls become themselves dry and brittle. The intra-mural fat-drops, however, at first minute and distinct, ultimately coalesce, and form a single large globule, or perhaps several, upon the interior of the cells.

The fatty cells with their *détritus*, as a result of the *vis-a-tergo* caused by other advancing cells, are gradually brought to the surface and eliminated through the excretory duct of the gland.

Here it is a proliferation of epidermal cells occurs from the sebaceous glands similar to that from the *rete*, whose germinal layer is responsible for the glandular development, and it is because these cells in their outward pass-



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age incur a fatty metamorphosis and crumble away as fast as generated, that the fatty contents are liberated.

As every one knows, this metabolism attracts no attention, physiologically, and the fat serves as a cutaneous and hairy lubricant.

Where this condition assumes a pathological aspect, however, an excessive sebaceous secretion may cause it to appear in great masses, consisting almost entirely of fatty epidermic cells. These clumps may be quite numerous, and the condition may even invade the coil glands. This fatty metabolism may be abnormal either as regards secretion or excretion, and, as we hope to show presently, may be either markedly increased or diminished.

With this brief *résumé* of the anomalous secretion of fat, and remembering that it may primarily manifest itself either as an almost purely oily coating, or as a universal or circumscribed deposit of very fatty scales, which may be of a thick, alutaceous consistency, or a filmy, dry, varnish-like covering, we will take up the progress of our case.

ICHTHYOSIS SIMPLEX.—Where this affection in the simple form has failed to immediately assert itself, the skin in such infants presents much the same conditions alluded to as having existed originally in the girl under discussion. The surface is destitute of the customary smoothness and soft pliability, and has instead a sallow, shagreen look. With the progress of the first couple of months the skin becomes progressively rough and of a dusky or grayish hue, and may communicate to the touch a feeling similar to that imparted by the skin of the aged. At this stage, practically a xerosis, the condition may remain stationary, or may continue progressive for years to come.

During *ichthyosis simplex*, the skin, as a result of its deficient normal secretion, may be destitute of all moisture, and the surface is covered with adherent or exfoliating fine scales, which are neither massed, imbricated, nor displayed in *plaques*, and generally present, both as to color and consistence, an alutaceous appearance, or even look silvery.

With the advancement of this condition there is to be observed a massing of the scales together, forming polyhedral elevations, with a more or less regular outline and closely approximated, especially upon the extremities and certain portions of the trunk. At other points the scaliness previously alluded to may appear in varying degrees, and in some places these plates may be distinctly bordered by the natural lines and furrows of the skin, with a resultant central or complete depression. These may assume darker shades of color than those described, presenting even a brownish or greenish-brown color.

Desquamation.—Perhaps at this juncture it would not be *mal apropos* to consider the manner in which certain proportions of these *squamæ* are disposed of. These scales, with the exception of the largest, may be detached without pain or any sensation of unpleasantness whatever. When their detachment is the result of friction they are not long in reappearing, and every case will present similar characteristics. When this patient removed her clothing to be photographed the scales shimmered in the light and fairly rattled in the profusion with which they fell about her. Nor can it be said that, even considering her condition, she is neglectful of her toilet, if we accept the mother's statement.

As a usual thing there is no itching in the advanced stages of this affection. Where, however, the primary condition continues to exist, a vigorous scratching is occasionally necessitated, and at such periods the finger-nails free considerable dry epidermic dust. In the more advanced forms of this disease, too, the plates may adhere by the central portion, while the margin tends to separate from the underlying skin, which, revealed, appears dry and shrivelled, with a papillary hypertrophy, attributable to an undue accumulation of horny cells within the hair-follicles.

"Shedding."—Incidental to this remarkable condition is the still more wonderful one, occasioned by a periodical disposition seemingly, of the underlying skin to rid itself of this "hide-

bound" anomaly. I refer to what is popularly termed shedding "casts" of the surface.

A patient of Hyde's is said to have regularly cast a slough of his integument every fall, and our own patient, through her mother, accords me the information that perfectly detached casts of the hands and feet, particularly the palmar and plantar surfaces of these extremities, were periodically cast off, up to some time ago, when their involvement ceased. When I first saw her, some two years ago, not only were these surfaces affected, but there were numerous scales upon her face and cheeks, and large plaques upon the lobes of the ears.

When exposed, the underlying skin is usually seen to retain its natural color, and its furrows are much more marked than is customary. In some instances these fissures may be quite deep, but are rarely hemorrhagic.

As the condition may show occasional coloration, it is rather the result of warmth, and is neither of inflammatory origin or dependence.

Skin Moisture.—Much interesting discussion has been given the subject of skin moisture and perspiration. Upon this the different writers are about agreed as to an almost complete absence of the sweat, which condition is due to a degeneration of the glands, resulting from a cystic condition impairing or annihilating the secretory function. This, too, although instances have been shown where with an excessive development in the sweat glands, there was a marked thickening in the ducts. This condition became so pronounced that, although the skin sensibility remained normal, the sweating was very excessive.

Consistent with this there usually occurs a marked diminution in the number and size of the sebaceous glands, which, instead of secreting the normal amount, partially retain the lubricant or secrete a thick material—*seborrhea sicca*—which helps form the bulk of the crusts, and gives to them additional power of attracting and retaining dirt. This is the condition confronting us here, and which is greatly exaggerated in the winter season, but during summer this

girl perspires excessively, and in a most offensive manner, especially in those regions usually attended with considerable moisture. This is especially true of the scalp, axillæ, and in the inguinal regions. The parent asserts that in summer time the odor from the head is so offensive, even at a distance of three or four feet, that life in the same room with her becomes most annoying, to say nothing of the distress it occasions the child, whose intelligence leads her to fully appreciate her predicament.

Topical.—Where of a post-natal character, the original manifestation of this disease usually commences upon the extremities, oftenest upon the elbows and knees primarily, remaining limited to one or more of these localities infrequently, and in very rare instances may disappear during the winter season.

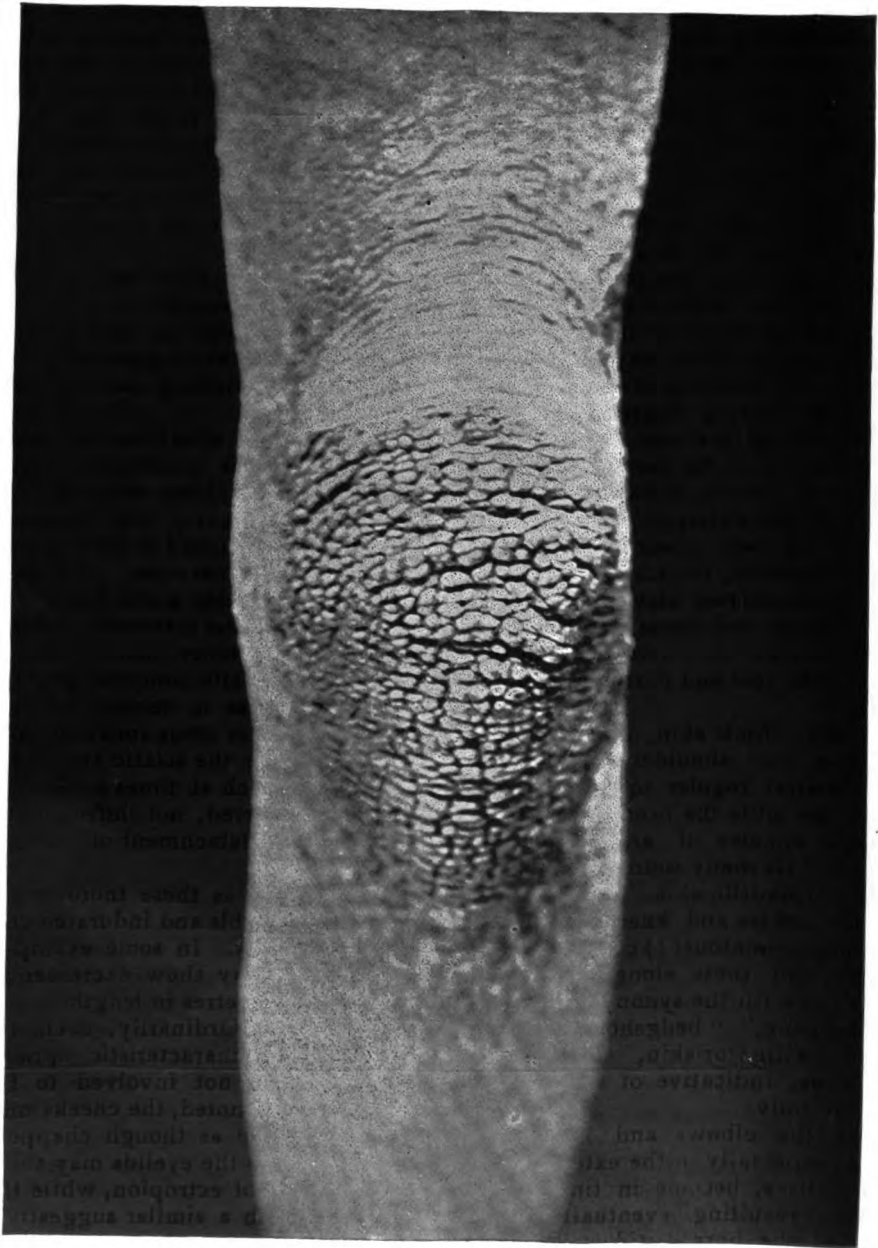
In this girl the marked extent of the disease can best be appreciated by observing the anterior and posterior full-length illustrations. If now it is borne in mind that the face, the palms and soles upon the extremities, and especially in addition such flexures as the axillæ, popliteal region and groin, together with certain portions of the genitalia, are the regions least affected, the condition of this child is at once made apparent. Further, as regards the generative organs, it may be said that the pudenda, as in this instance, are much more likely to be involved than correspondingly (?) the glans penis and prepuce of the male. The scrotum may show marked involvement.

The neck is generally the worst affected, and is frequently considerably pigmented. It certainly has the greatest amount of discoloration here, and yields to no part of the body as to intensity of the malformation.

Further discussion of the extent of this condition will be given in the consideration of the varieties of the later forms of *hystrix*.

ICHTHYOSIS HYSTRIX.—As has been said, the varieties of ichthyosis are two, and their consideration is a refinement, inasmuch as they are entirely of degree, and this latter form, *ichthyosis hystrix*, is of necessity the chronic outgrowth of the *simplex* form. Like psoriasis, the





extensor surfaces are involved primarily, and in this variety we now discuss the disease always shows the greatest chronicity and the worst forms.

A localized condition, which Morrow¹⁰ considers a spurious form, occasionally asserts itself, and is usually restricted to the palms of the hands and soles of the feet, or even the dorsum, in which case, with the thickened epidermis and horny excrescences, it is called *ichthyosis localis*. Most frequently the dorsal involvement of the feet, as seen in the enlarged illustration, may represent one of the highest types of the form under discussion.* In addition to the erratic condition noted in this late stage, there may at the same time be earlier forms of the trouble still manifest in varying degree. In such patients, taking the one under observation, there will be seen besides the scaly *simplex* forms, shown in the full-lengths and the enlarged picture of the feet, and as best observed over the legs and forearms, the additional thick, diffuse, plate-shaped elevations resembling spike or nail-heads, which latter condition is now best detected over the dorsum of the feet and particularly upon the toes.

The dry, thick skin, as in the enlarged arm and shoulder, may crack in a somewhat regular square fashion, so as to resemble the protective plates of certain species of armadillo, and hence one of its many sources of nomenclature, "armadillo-skin."

At the ankles and knees an equally marked papillomatous (?) condition may be noted, and these elongations have much to do with the synonymous titles of "porcupine," "hedgehog," "rhinoceros," "alligator-skin," and many other names, indicative of appearance and degree only.

About the elbows and knees the wrinkles, especially in the extension of the extremities, become in time much intensified, resulting eventually in a breaking of the horny epidermis, occasioning a large number of wavy or concentric whitish lines separating rows of

warty elevations, which are best seen in the second figure, at the elbows.

While, as has been observed, the thinner and more tender skin is oftenest spared, there is little disposition to overlook much of either the anterior or posterior aspects of the trunk or the nates.

The parts but slightly involved have been likened to "fowls' legs" and "fish-scales," or later, conversion into rugged, bristling, quilled, or even verrucous or corniferous envelopes, furnishing quite a field for the onomatopœtic individual.

Even the deep blue sea has been delved into for a comparison, and such prickly excrescences or serrations as seen upon the arm has suggested a comparison to the bristling skin of some sharks.

Such regional affections as shown upon the knee has occasioned Kaposi to regard this condition when an *ichthyosis vera* as entirely papillomatous, and, as before mentioned in the etiology, in some instances nervous. One case⁶ reported showed these warts distributed over the areas of the intercostal nerves, and in another instance, that of a young girl in whom the affection was general, the disposition was in streaks, while a recital of two other cases spoke of these verrucæ outlining the sciatic and crural nerves, over which at times a local inflammation occurred, not infrequently with a profuse detachment of the epidermis.

In such cases as these there is not infrequently a friable and indurated condition of the nails. In some examples even the scalp may show excrescences one or two centimetres in length.

The Head.—Ordinarily, even the face presents a characteristic appearance, and where not involved to the extent heretofore noted, the cheeks may appear roughened as though chapped, and in some cases the eyelids may show varying degrees of ectropion, while the lips are dry with a similar suggestiveness, and the oral commissures are more or less wrinkled.

Scalp and Hair.—The hair and the underlying scalp are usually more or less matted from an *ichthyosis sebacea*, which is a profound condition of dan-

* The proper appreciation of these illustrations is much enhanced by the use of a magnifying glass.

druff, and, as seen in our last illustration, is practically a mixed seborrhea—*seborrhea sicca et oleosa*—if such a lugubrious anomaly is permissible.

Examination shows different degrees of accumulated sebaceous material, in some cases forming oases of firm and thickly adherent greasy crusts, which may mat the hair together, as in the more pronounced case we present, where, not being readily removed, as it constantly should be, some dermatitis can also be observed.

There is more or less of a pallor of the scalp likewise present and attributable to the anemia, which, however, is not so profound as might be expected. At times there is a marked hyperemia or a localized inflammation, which may eventuate in a dry, lustreless condition, with a circumscribed or general alopecia, which this girl has, fortunately, not been troubled with.

Itching of the scalp affords considerable annoyance now and then, and may at times be most intolerable.

The association of the *seborrhea capitis* described above, and represented in the picture, is but a manifestation in this locality of the true ichthyosis, which we undoubtedly have here. The identity of the two as nothing but regional manifestations of one and the same trouble is fully established by an examination from either the scalp or body, and showing that there is no doubt a varying amount of sebum mixed with the masses of epidermis, and which can be extracted from these specimens with ether, in the form of stearin and cholesterolin.

Carini, of Milan,¹ has reported an attenuated form of *seborrheic dermatitis* which he considers analogous to a case described by Grass and Torök under the name of "laminar exfoliation of the skin in the new-born."

Pigmentation.—A question somewhat in abeyance is that as to the existence of a genuine pigmentation. From the result of investigations made, I am rather inclined to think that each individual case is a law unto itself in this matter.

In one patient a pigment line has been seen to extend from the forehead

to the symphysis, likewise starting at the vertex, and posteriorly extending in the median line to the coccyx, similar brown pigment streaks following the cutaneous nerves of the extremities, all of these being accompanied laterally by papillary warts up to one centimetre in height.

However, it is not altogether a rare occasion when this discoloration may be suggestive of the boy's unseasonable plea in winter of shadows and walnut-stain, when told to apply some ablument fluid to his hands.

As it is almost impossible for these children to keep their rough, scaly skin clean, and in the advanced grades the dirt and grime simply cannot be prevented from penetrating into the minute fissures and rhagades, they soon present a dingy, and occasionally almost black pearance, where the exposure is greatest. This state has led to the confusing misnomer and unnecessary sub-classification of "*ichthyosis nigra*." But this appearance may sometimes ensue from the use of certain salves and other applications, as caustics, etc. Frequently, though, it can be removed by friction, leaving a gray, abraded surface, not by any means more prepossessing than the former.

Blisters.—Somewhat singular is the persistent disposition in the early stages of the *simplex*, and later forms of the *hystrix* varieties, to the formation of evanescent bullæ or blisters, which, following a slight prodromal itching or sensation of skin tension lasting a few hours, results in the development of one or several blisters. These prodromes may attract attention late one afternoon, or perhaps only before retiring, as our patient relates, and occasionally the cutaneous irritation may be almost distracting, but perhaps will after a time subside, and the patient falls asleep, only to awaken in the morning with the bullæ fully developed. After an increasing tension of a few hours they gradually shrivel up and disappear, leaving a raw erythematous exposure, suggestive of the proverbial boiled lobster.

Multiple bullæ may form at different situations, or even one large encircling bulla may form a zone about some por-

tion of an extremity. The ankles, knees or elbows may be involved, or they may even appear upon the abdomen or other parts of the trunk. Our patient, we are told, was so markedly hampered by their presence upon her hips this late fall and early winter, that for a time she was prevented from straightening up and was compelled to walk bent over.

Dermatitis.—The face is periodically attacked by a dermatitis late each recurring spring, and in the summer these pemphigi are most troublesome and persistent. The exposed surface, as may be anticipated, soon dries up in the heretofore described characteristic manner, cracks, and the process of scale-formation is again resumed.*

Other Complications.—The patient has thus far escaped xerophthalmus in any of its forms, although last summer she was treated for a temporary affection, which, from the mother's description, may have been simply a catarrhal conjunctivitis. The patient was formerly a victim to otalgia, but not within the past two or three years.

Microscopical.—A consideration of this condition, now, from a microscopical point of view, may prove of interest. The *cutis vera* is quickly seen to be unaffected, except perhaps for a microscopical *crevasse*, occasioned by some intense rhagade which may have penetrated to this depth.

As to the *rete*, it has been asserted by one⁴ that the difference between a wart and an ichthyotic plaque of great density lies in the fact that in the latter a sclerosis exists of the connective tissue, with a *relatively unchanged rete*, surmounted by concentrically disposed horny layers of epidermis over the underlying, but elongated papillæ, which condition does not exist in the wart.

But another authority⁵ attributes the condition in both forms of the disease to a *sudden transformation of the rete cells into the horny layers*, with an excessive presence of the inter-cellular cement

substance, indicating an early cornification of the rete cells. To this is attributed the cause of the relative narrowness of the mucous layer, as compared with the thicker horny layer, and, on the other hand, the long retention of the horny cells. In *hystrix* this condition is even more marked, for while other papillary keratoses have associated a thick, horny layer, with a still thicker and actively proliferating rete, we see in this affection an enormous horny layer over a thin and ill-nourished, slowly vegetating, almost atrophic rete.

Malpighian Layer.—Taking now a skin, or horizontal section of the Malpighian layer, we see that it is proportionately small, and the ridge-and-furrow cells (prickle cells) have more or less completely disappeared, showing the keratinous transformation of epithelium here to be somewhat precipitate.

Examination of numerous slides disclose the *minutia* of the hypertrophied skin in varying stages according to the degree of involvement in the localities represented. At the time we are able to observe the dilatation of the vessels as well as the moderate cell infiltration into the corium and papillæ, as likewise the occasional sclerotic metabolism in the connective tissue.

Our observations may now be considered in general, and we recall that the horny layers were greatly thickened, and while the glands and hair-follicles were perhaps normal at some points, at others they exhibited a remarkable cornification, which extended even to root-sheaths of the hair, the follicles of which in the greater number of instances were not unlikely indurated and thickened by an overgrowth of the epidermis, while the hairs themselves were noted to be atrophied, perhaps tufted at the roots, and easily shed.

Elongation of the papillæ was likewise seen, but they were not dendritic, and vascular dilatation was here also noted.

Further observation showed a marked diminution of the adipose layer, and the sweat-glands were seen to have disappeared or only existed as cysts, while the sebaceous glands, too, had either markedly decreased in size and number,

* The site of recent bullæ is very well shown upon the dorsum of the right foot in the illustrations, also the left posterior arm in the full-length view, and below the right outer malleolus in the same picture, besides in the right axilla of the enlarged section.

or those remaining had mostly become cystic. Briefly, it may be said that the elemental proliferation occurs in the connective tissue, stratum corneum, blood-vessels, and the *papillæ*, which we will now consider.

Fagge and Esoff, contrary to the previous assertions of certain writers, were independently the first to announce that the *papillæ* are not hypertrophied, but elongated.

A vertical section of the deformed masses shows the *papillæ* to be enormously elongated, and covered with beautifully disposed undulations of horny scales, piled up in thick cones, as in the coarser portions of the cuticle, or as generally seen in warts.

These stratifications are peculiarly arranged, suggesting the lamellæ of certain onions, the former enclosing numerous *lacunæ* caused by varying degrees of retraction, and it is all mainly the outcome of a long retention of epidermal masses. The inter-papillary cones are also determined to be enlarged.

Further observation of these polygonal ichthyotic plates shows them to consist chiefly of corneous epidermal cells, their long axes parallel with the surface of the skin, with an unusual accretion of pigment granules lodged between the strata, and as previously intimated, may be seen in varying degrees of intensity over the integument of this girl, the extent of the involvement being best comprehended by a look at the full-length views. The neck, however, is by far the deepest pigmented, and the least affected by the dirt, which will always cling to even the would-be immaculate.

PROGNOSIS AND TREATMENT.

The future of a patient afflicted with ichthyosis is by no means in jeopardy, and the disease, except in the infantile forms of seborrhea, where the function of the skin is largely in abeyance, can never be said to influence mortality.

The simpler form of the trouble can be kept from assuming the more advanced stages, and it cannot be said, *vice versa*, that the *hystrix* will not revert to the earlier stage, where the

proper, but long-continued, treatment is patiently prosecuted.

Condie, even as early as 1850, reported a case which was cured, and concludes with the remark: "Eighteen years have now elapsed without any indication of the disease returning."

If we consider the affection merely as an epidermal accretion of the composition already described, there is no good and valid reason why it may not be removed, and it is known it can.

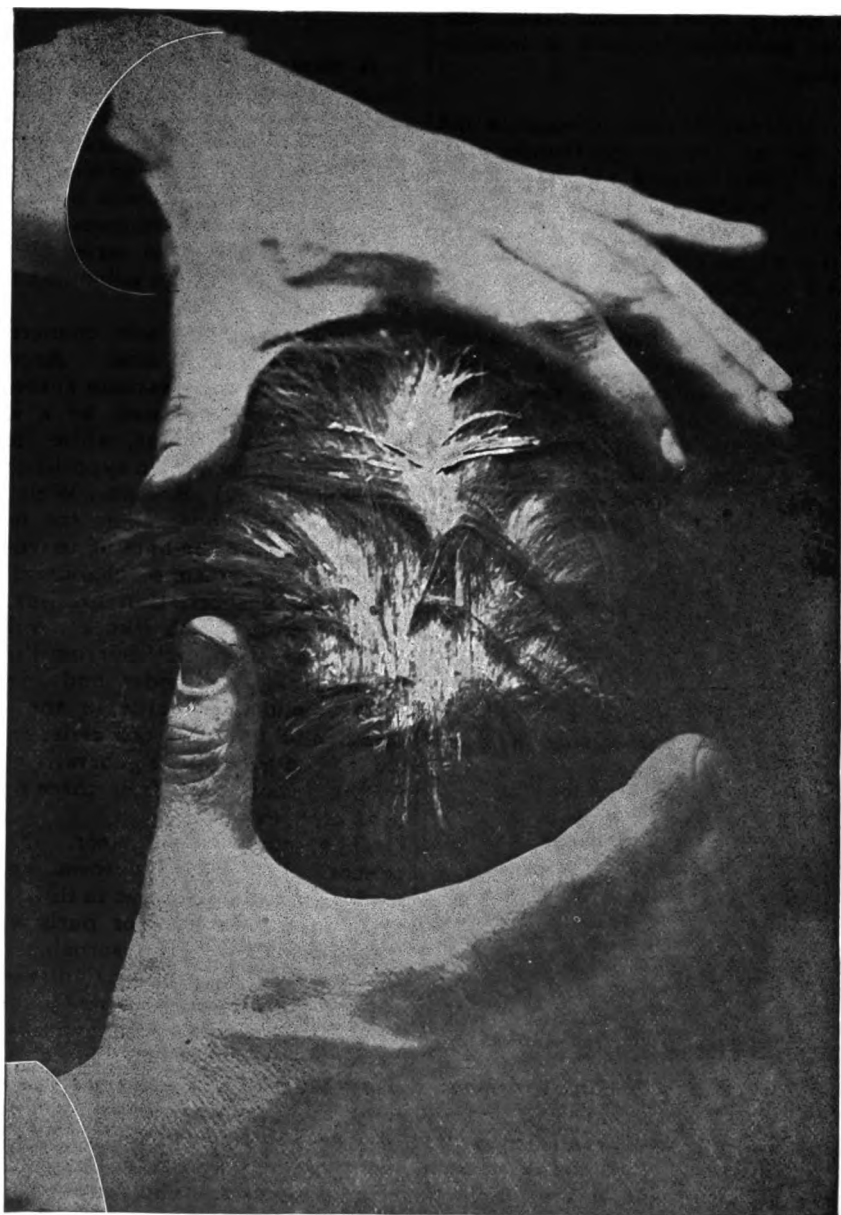
The essential drawback to a favorable prognosis in these cases, as to a complete or partial cure, is two-fold. Either the physician is not disposed to, or cannot afford to, give his time and attention to these cases to the extent which the successful coping with them demands, or else the immediate resources of the patient are limited, both as to patience and the furnishing of "sinews" for the protracted warfare upon the disease which the successful combating of so unsightly a deformity would entail.

The Herculean task is not to remove the excrescences which so disfigure the body, but it is to obtain a perfect cosmetic effect. The early condition of the skin is what has to be attended to, and the perfection of this may be likened to the restoration of hair upon the head of one prematurely bald, whether this alopecia be the sequence of a premature degeneration of the hair-follicles, a specific trouble, or some febrile malady, as typhoid. The complete atrophy of a follicle following neglect in such a case is to be determined, and upon that, together with the institution of a faithful and proper treatment, the prognosis resolves. So it is with the restoration to, or preservation, of a comparatively normal skin. *Verbum sat sapienti.*

As to those cases where a perfectly healthy skin has practically never existed, the restoration to the incipient condition must be followed up with an unremitting external treatment, which may, or may not, be aided and abetted by internal medication.

Where this is pursued judiciously and systematically, the end will doubtless justify the means, and there is small





doubt in our mind but the benefit will be so salutary that the cutaneous function, even through the assistance of its impaired accessories, may be brought into at least a more perfect state than has ever previously existed, if not, indeed, cured.

[The writer desires to express his thanks to the several gentlemen who have so kindly placed at his disposal literature upon this subject; to the editor of the LANCET-CLINIC for his cordial coöperation; to Messrs. Benjamin and De Lisle for their care and painstaking efforts to effect a faithful reproduction of the subject, and also the Weisbrodt Engraving Company for the goodly interest they displayed in the proper reproduction of the half-tones; to all of whom he is very grateful for their highly appreciated and substantial aid in the publication of this paper.]

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- 731 W. FIFTH STREET.

Quinine in India.

Some years ago the Indian government had to import annually \$250,000 worth of quinine, and even that hardly sufficed. After a great many experiments, the cultivation of the cinchona tree was made successful in India, and now there are 4,000,000 trees in Bengal, and every rural post-office in India sells a five-grain packet of the drug for half a cent, while the government makes from \$2,000 to \$3,500 a year out of the profits.—*Med. Age*.

CHANCROIDS OR SOFT CHANCER.

BY M. L. RAVITCH, A.M., M.D.,
LEXINGTON, KY.

A misapprehension existing in the minds of some syphilographers regarding the unity of all venereal diseases has given rise to a misconception as to the treatment of chancroids or soft chancres. Though it was proven that the unity theory is erroneous, false and fraught with many and varied evils, yet some practitioners are adherents to this false theory.

A chancroid or soft chancre is a venereal contagious ulcer. According to best French and German authorities, chancroids are produced by a special so-called chancre virus, while the hard chancre is caused by a syphilitic virus. Turrene, Zeissel, Rossner, Welz, Neuman and Wellander claim the bacillus chancroidis the medium of inoculation. The micro-organism of chancroid is described as a short, thin bacillus, with rounded ends, much like a dumb-bell, about one and one-half micromillimetres in length. Wellander and Kroeftig have found the bacilli in the protoplasm and between the cells, often in chains and groups. It generally appears within a short time, from three to eight days after exposure.

The chancroidal ulcer, the soft chancre, has a ragged form, and pus is the contagious element in this. Strain away the pus and liquor puris will not infect. Pus is non-absorbable, hence this is not a constitutional disease. It being auto-inoculable, there is usually more than one chancre. Syphilis is not auto-inoculable; hence there is but one chancre upon the same individual. Thus are given differential appearances between chancroids and hard chancre that enable the observer to make out a clear diagnosis. The buboes of chancroids are prone to suppurate, the true chancre not at all. If there is still doubt about diagnosis, an auto-inoculation will settle it. The chancroid will take, the true chancre will not.

I mention these facts here to dissipate the idea, still remaining among

medical men, that there is a unity in these diseases.

Taking the position that I have, I also readily and easily conclude that chancroid is an entirely local disease, and, unlike the chancre of syphilis, is never followed by constitutional symptoms. It appears in the beginning as a pustule, surrounded by a pink areola, soon changing into an ulcer, with inflammatory, reddened and swollen edges and base; it soon suppurates freely, and is absolutely contagious. It runs a typical course of from six to seven weeks, with a stradium of destruction, which is also contagious, and a stradium of repair, in which it is converted into a healing wound and is no longer contagious. The number of chancroids occurring at one time will vary according to the number of abrasions with which the virus comes in contact.

Space does not permit me to describe and discuss all the forms of chancroidal ulcers. I will only say that a simple ecthymatous or pustular ulcer, if neglected or abused, is liable to grow larger and become phagedenic or destructive in its nature.

Among all venereal diseases, chancroids, though the most amenable to treatment, seem to give considerable trouble if not treated properly.

What is, then, the cardinal point of treatment? Destroy the virulent character of the ulcer and convert it into a simple sore with a tendency toward healing. Were I asked how to accomplish it, I should say that it was my firm belief that the judicious use of mild solutions of formaldehyde and unguentine in all cases of chancroidal ulcers are attended with better results than any other agent with which I am familiar. Formalin and unguentine are comparatively new therapeutic agents, yet their reliability and effectiveness have been accompanied by such statements that there can be no doubt of their value. Mild solutions of formalin applied to chancroidal ulcers seem to destroy their virulent nature. Followed by judicious applications of unguentine, the ulcers become painless and lose all the disagreeable features of the disease. The profession need not be skeptical on

the question of the use of unguentine, as it particularly commends itself from the fact that this ointment contains the most desirable ingredients suitable for allaying external inflammatory diseases. The recovery is more rapid and permanent, and the frequency of inflammatory complications, which is often met with after dressing with powders, is greatly reduced.

In conclusion, I would beg to submit but one case among the many in which a 2 per cent. aqueous solution of formaldehyde and unguentine have proven to be the most valuable therapeutic agents.

Mr. F., aged twenty-four, came to my office October 10, 1897, bringing a phagedenic chancre on the prepuce extending to half the length of the penis. Had resisted for seven months all kinds of treatment by different physicians, and had never healed even temporarily. The history of the case was such: The patient had a pustular chancroid which started to suppurate. The first physician cauterized it thoroughly and applied different remedies. As the wound did not show any tendency to heal, it was cauterized every day. The ulcer grew larger and more painful. The patient consulted another physician. The ulcer was cauterized and curetted. As it did not heal, it was pronounced a hard chancre. Patient was put on constitutional treatment. The most rigid treatment was applied, and yet the ulcer became more virulent in type. The ulcer had almost extended to half of the length of the penis, and was covered with muddy-looking morbid granulations, from the surface of which exuded a muco-purulent discharge. It resisted all kinds of treatment, including two unsuccessful attempts of skin-grafting.

As a preliminary treatment, I told the patient to soak the penis in hot carbolyzed water and come to my office next day. The ulcer was then irrigated with a 2 per cent. aqueous solution of formaldehyde, and dried and dressed with unguentine. The ulcer was treated in such a manner daily. An improvement followed in a few days. After two weeks' treatment not the slightest

sign of pus was to be found. The ulcer became painless and was converted into a simple wound. The unguentine alone was now used. The wound granulated nicely. On November 20 the patient was discharged, the wound having entirely healed.

How the Compression of the Carotids May be Utilized in Surgery to Effect Anesthesia.

M. Jaboulay (*Bull. Du Lyon Medical*) says that one may effect prompt and effective anesthesia by the compression of the carotids.

The carotids need be compressed but a few moments. We will notice that the patient straightens out, closes the eyes and becomes quiet. The visage becomes blue at first, and then pale. Consciousness is partly, but not completely lost.

It is now we may reduce a dislocated shoulder or hip or coaptate the ends of fractured bones. Our patient remains unconscious for a few moments after pressure is removed. It is now that we may examine a fractured hip, make an incision, or any other rapid movement.

This is recommended when other anesthesia is not to be had, or when a brief period of anesthesia is desirable.—*Indian Lancet*.

Carcinomatous Degeneration of Fibroid Tumors of the Uterus.

Rodemacher (*Centralb. f. Gym.*, 1897, No. 41) holds that all cases of so-called carcinomatous degeneration of fibromyomata uteri are in reality simply secondary carcinomatous infiltration of the tumor from primarily diseased endometrium. He cites a cases in which, on post-mortem examination, it appeared that two interstitial fibroids were undergoing carcinomatous degeneration. But upon careful study it became evident that the two neoplasms present were in reality invaded by cells from a malignant process which had developed in the endometrium. The mucous membrane covering one of the tumors was entirely replaced by carcinomatous tissue.—*University Med. Magazine*.

THE

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317 W. SEVENTH ST., CINCINNATI, O.

CINCINNATI, APRIL 2, 1898.

Editorial.

THE CIGARETTE QUESTION.

Lawyer Garrison, in a paper called "A Brief for the Cigarette," before the New York Medico-Legal Society, has created some little excitement in certain circles of reform work. In a shrewd, lawyer-like way he brought out very prominently the errors of those who condemn all cigarette smoking. He urged that the tobacco used was the purest, and little or no adulterations were found, and altogether the cigarette was very harmless and entirely innocent of the grave charges so often made against it.

Of course, this conclusion was not accepted by a great many authorities. One man proved to his satisfaction that Lawyer Garrison had received a retainer to make this plea in the interest of the cigarette manufacturers. The Secretary of the Medico-Legal Society seized the opportunity to enlarge the discussion by sending Mr. Garrison's paper, with some questions, to a large number of physicians and specialists for opinions. The answers were evidently not satisfactory,

and hence a second circular follows, asking for definite records of cases of insanity and other diseases from the excessive use of cigarettes. The Secretary is clearly on the war-path to secure clear, substantial facts on the subject under discussion.

The experience of Dr. Sevier, of Yale College Physical Department, that all cigarette-smokers are feebler physically and mentally than other students; also Dr. MacDonald's studies of school children at Washington reaching the same conclusions, are among the most extended studies on the cigarette in this country. This is one of the topics about which so much personality and individual exists as to make it difficult to get at any certain facts.

Cigarette-smokers have one opinion and those who do not use them have another. Each one is positive that his conclusions are correct. The facts are that the use of cigarettes have increased, especially among the young, enormously, far beyond any rational limit. The amount last year was over four billion cigarettes, and these are largely used by young persons.

Instances of poisoning by cigarettes are mentioned in the papers with increasing frequency. Every physician with a large circle of acquaintances can cite instances where cigarette smoking has resulted in injury. Yet it would be difficult to write up any special pathology or physiology of its action beyond what is known of nicotine poisoning.

Evidently, Lawyer Garrison's paper and Mr. Bell's efforts to clear up this subject are commendable, and just now of much interest. The new school book on physiology condemns the cigarette sharply, and it is time for its defenders to appear, if they expect to be heard.

T. D. C.

THE FLOODS.

The Ohio River and its tributaries are having a high time. Rippling, surging muddy torrents are devastating thousands of acres of land and hundreds of homes are washed out. A considerable number of people have been drowned, and in a few instances entire families have given up their lives before the torrents which engulfed them. Railways are greatly damaged, and mail deliveries delayed. In every direction the ground is supersaturated with water. Distress is now present, and there will probably be an increase in sickness and mortality rate. In order that this may be avoided as far as possible, houses will have to be thoroughly cleansed, dried, and ventilated. Even then it takes a long time for the earth beneath flooded houses to become dry, and so of the walls. Suggestions to the people by physicians in regard to such conditions will be timely. At best, pneumonia and other diseases of the respiratory organs are likely to be developed as sequelæ of present flood conditions.

Since the memorable floods of 1883-84 the railways have elevated their tracks and bridges. Superb iron viaducts, connecting the western hills with the down-town city, are high above the water level, so that former great inconveniences are not experienced.

At this writing the Ohio River at Cincinnati is sixty feet above low water mark. It was ten feet higher in 1884.

TICKLING REWARDS.

The following item taken from an exchange tells an interesting little story:

"A writer in the *Public Ledger* of Philadelphia says that it is the custom at most hospitals in that city to pay, with a drink, the policeman directing accident cases to them; while another

writer says that certain hospitals pay one and two dollars in cash for each patient obtained."

The physician who does not understand and fully appreciate that item should be trephined for softening of brain substance. Think of it! The offering of prizes for hospital patients! There never was conceived a more potent method of pauperizing the people than this, and yet it is in keeping with the drummer business—in fact, is one and the same thing. It would be a little hard to make one believe that church collections were used for a purchase of whisky and other kindred refreshments for those who are instrumental in steering the unwary afflicted to their hospitable doors, or where the bunko-steerer himself has stomach troubles and don't indulge, the aforesaid church collection might be used for dividend purposes on a cash basis.

Commissions to beguiled and innocent country physicians, commissions to trained nurses, commissions to preachers and others! All degenerates who are defective in normal, moral brain cells and rigidity of integrity in spinal column are brought under the influence in order to fill pauper beds in a hospital. Even the cup that intoxicates is held out to the hospital steerer.

If the practice of medicine is a business by which its votaries earn a living, why is it that there are those who willingly cater to men and institutions that are cutting the aforesaid votaries' financial wizen? is a conundrum for all non-hospital staff physicians to solve.

A few years ago the hospital craze broke out in all English-speaking countries. The epidemic was of a virulent type, and malignant in its attacks, in some localities worse than others, but always had similar symptoms and produced the same pathological lesions.

The rich and poor alike were victims of the disorder. Even doctors became infected, and tried to reason to themselves that patients of all classes could be much more successfully treated in hospitals than in homes; that pretty, be-capped and smiling maids were better attendants upon the sick than those of mature years. A greater mistake was never made. The pretty maid might act as a distractor and attracter of attention, but with all of her deluthering blandishments she could not make an iron cot in a hospital, a bed like the one at home; her step, ever so light, was heavy and wearying in comparison with that of a mother, wife or sister. How long does it take for a physician to tell and instruct one of the family how to give a dose of medicine, dress a sore or make a poultice, take the temperature or count respirations and pulse, or anything else needful? Then the expense; nurses' wages are often greater than doctors' fees.

The rich man who has twinges of gout and conscientious scruples in regard to the last financial squeeze made upon others, where he very well knew he violated the moral teachings of the Savior of mankind, anesthetizes his moral perceptions by declaring a dividend with some unneeded hospital, that stands ready with open coffers to accept and distribute his shekels. That is the way it goes.

This epidemic hospital craze is at its height, but antidotes in the way of revulsives are being administered and passed around, and with some apparent good effect. In time, cures will be accomplished. The most effective remedies are hygienic in character, and consist of wide-open ventilation. The writer recognizes his own timidity and sins of omission, but his motives are strong, so that he hopes in course of

time and with the strength that comes from practice, to get the LANCET-CLINIC radiator a little wider open. For purification purposes there is nothing much better than a free dissemination of knowledge.

EDITORIAL NOTES.

"Too great care cannot be taken in, according to the journal from which we quote, due credit for authorship; and the WEEKLY will endeavor always to act thus fairly. Like most others, it is, perhaps, easier to find fault with others than to discover errors of our own.

If we have, in our columns, worthy original matter, it is a compliment to us to quote it, but pray give us some credit. Within the month, the Cincinnati LANCET-CLINIC has appropriated an article, bodily, as one contributed originally to its pages, and fails to acknowledge that the paper in question first appeared in the columns of this journal."—*Atlantic Med. Weekly*.

Thank you, Brother *Weekly*. In common with all well-regulated medical journals, it is a rule of the LANCET-CLINIC office to give credit to all reprint matter. Through oversight, unintentionally, and from no other cause or reason, such an omission may and sometimes does occur, as in this instance, for which apology is made. The *Atlantic Weekly* is a highly-valued publication, and all the more appreciated for the kindly manner in which it has treated the subject.

Recently the editor of the LANCET-CLINIC received a bill for \$100, charged for publishing a translation made by T. C. M. The bill was made by a New York literary magazine publisher, and charged that the translation was a steal and would have to be paid for by the LANCET-CLINIC. A little investigation showed that there was a very probable steal upon the part of the literary author, he publishing the

matter as original, while T. C. M. offered his matter as a translation, which it was, from the *Journal de Medecine*, and antedated the American writer.

On rare occasions—and not very rare, either—matter from the LANCET-CLINIC is republished without proper credit. This is always overlooked by the LANCET-CLINIC editor, as he knows that all reputable journals give proper credit, and that where an omission to do this takes place it is unintentional, and not intended as a violation of ethical journalism.

The bill of the magazine above referred to has not been paid, and will hardly be prosecuted.

THE Secretary of the Ohio State Medical Society says the next annual meeting of the Ohio State Medical Society promises to be one of unusual interest. Dr. Senn will deliver the address on surgery. Dr. Hare has promised to deliver the address on medicine. A number of the ablest practitioners in Ohio have prepared papers to be read at this meeting. Matters of interest to the whole profession, in the way of medical legislation, will be presented by the State Board of Registration.

The headquarters for the society will be at the Great Southern Hotel in Columbus. The date of the meeting is May 4, 5 and 6, 1898.

THE Michigan College of Medicine, on the evening of March 24, conferred the degree of Doctor of Medicine on twenty-five matriculates.

ACADEMY OF MEDICINE.—Regular meeting, Monday evening, April 4: Paper by Dr. Henry W. Bettmann, "Enteroptosis." Annual dues are now payable. Telephone 1981.

Selections.

FROM CURRENT MEDICAL LITERATURE.

Irritating Effect of Nasal Secretion in Adult Life.

Dr. Thos. F. Rumbold, in the *St. Louis Med. and Surg. Journal*, says:

Upon inspection through the anterior nares of an adult, the first abnormal objects seen are the enlarged inferior turbinate processes and the thickened or deflected portion of the septum-nasi. If each of the prominent parts of the nasal cavity is examined minutely, the irritating effect of the secretion will be plainly observed to decrease the higher the inspection is made, just the contrary to what would naturally be expected, for it is well known that diseased action commences in the upper portion of the passages and extends downward. The whole of the nasal mucosa is involved to a more or less extent; that is, the whole surface pours out an abnormal muco-purulent secretion, not equal in quantity from all parts of the passage, but in proportion to the degree of injury done to each part by this irritating nasal outflow. To make this more plain, in the infant, at first the anterior and superior portion of the nasal passage is involved; the disease invariably commences here because the greatest force of the inspired air strikes here; these portions alone pour out secretions; soon the whole nasal mucosa throws off abnormal secretion in proportion to the degree of inflammation affecting each part. It is common to see an infant with the lower portions of the nasal passages free and the upper portions full of secretion. In the child, as the secretion has become a little more acrid, a little more is thrown off by the middle than by the superior turbinate processes, and still more from the inferior than from the middle turbinates. In the older grades the differences in the amounts thrown off by the two lower turbinates are still greater. The reason for this uneven degree of inflammation and uneven amount of out-pour of secre-

tion lies in the irritating effect of the secretion itself, as already intimated. The secretion that is formed on the superior turbinates soon leaves this locality—certainly before it has had time to become very acrid—and flows upon the middle turbinates, all the time acquiring still greater acridness, and when about to leave these turbinates and fall upon the inferior turbinates its acridness is greater and it becomes more inspissated by the heat occasioned by the increased inflammation, and the more inspissation, the longer it remains on the surface; showing plainly that the nasal secretion becomes more and more irritating the longer it remains in the nasal cavities, and as the irritativeness increases the more secretion is thrown off by the surface that is most irritated. It is for these reasons that the inferior turbinate attains, in adult life, sufficient size to hold the partially inspissated secretion, so that the accumulated mass is sufficient in quantity to touch the septum nasi; then this part of the septum begins to increase in size because of the irritation produced by the acridness of the morbid secretion thus held to it, and also because the partially occluded condition induces a partial exhaustion of air in the nasal passage at every act of inspiration, as already stated. This shows the mechanical means and the pathological conditions that of necessity must induce excess of growth of this part, not only of the vascular tissue, but of both cartilaginous and bony structure.

Varieties of Aortic Regurgitation.

Handfort, of Nottingham, gives the chief characteristics of the rheumatic cases of aortic regurgitation: (1) rheumatism comes on at a much earlier period of life than atheroma, and is the main cause of aortic regurgitation arising between the ages of five and thirty-five years; (2) the arteries are generally sound; (3) the heart-muscle is comparatively sound; and (4) apart from fresh attacks, the valvular disease soon ceases to be progressive. In all these respects rheumatic aortic regurgitation differs essentially from the atheromatous and the prognosis is very much more

favorable. Not infrequently free regurgitation might exist for years with a complete absence of symptoms, even though the patient led an active life. The atheromatous cases are, by far, the most numerous and serious and present the following distinctions: (1) the disease is essentially a degeneration and arises in middle life, rarely before the age of thirty-five, except when syphilis is the main cause; (2) the arteries are always involved to a considerable extent; (3) the heart-muscle is rarely sound; (4) the disease is almost always progressive; and (5) it affects the male much more frequently than the female. Of the atheromatous cases there are four chief subdivisions, according to the mode of production: (1) the syphilitic, arising generally between the ages of thirty and fifty years, affecting sometimes mainly the aorta and branches and sometimes mainly the valves, difficult to distinguish from fusiform aneurism, and rapidly progressive; (2) those arising from laborious work in strong, muscular men, generally between the ages of forty and fifty years; (3) the arteriosclerotic, arising between the ages of fifty and sixty-five years in the gouty and in men who habitually ate and drank too much, especially when combined with hard mental work; and (4) cases arising from "old age,"—about seventy years. No general rule can be laid down for all cases as regarded the use of digitalis. It is most useful when there is consecutive mitral disease with dropsy, next in the rheumatic cases and those arising from laborious work; the latter can often be enabled to continue their work by daily doses of digitalis. The chief cause of failure of compensation is degeneration of the ventricle from fibroid change, the prognosis of which depends mainly upon the degree of occlusion of the coronary arteries. When the fibroid change is advanced digitalis has little tonic stimulating effect upon the heart and not only fails to do good, but does positive harm, because it still causes tonic contraction of the small arteries and increases the work of the failing heart. Digitalis is of great use in failure of compensation from temporary causes. It generally does harm in the syphilitic,

the arteriosclerotic, and the aged cases.
—*London Lancet*.

Hemorrhage in Neurasthenia.

Ausset (*Revue de Médecine*, September, 1897) calls attention for the first time to hemorrhage from the mucous membranes without any appreciable lesion sometimes observed in neurasthenics. He has collected six cases, two of which came under his own observation, in which there were attacks of hematemesis at various intervals of time, sometimes of a considerable amount, the patient vomiting nearly a quart of blood in an attack. The patients presented typical symptoms of neurasthenia; the attacks often came on as a result of some exhaustion or excitement. In a seventh case there were uterine hemorrhages. The hemorrhages had come on at varying intervals through a period of many years and the most careful examination failed to reveal any structural disease of the stomach or uterus. Similar hemorrhages have not infrequently been noted in hysteria. The vomited fluid in one case was analyzed and found to be blood mixed with saliva and gastric juice. The patients had all presented other symptoms of vaso-motor and gastric disturbance such as are common in neurasthenia, and the attacks always followed physical fatigue, too severe intellectual work, strong emotion, great joy or profound chagrin. They were preceded by an indefinable malaise, an inexplicable disquiet, and a feeling of impending trouble, but they came on rather suddenly, without special warning, and unattended with pain or any special sensation. After the attacks the patient felt weak and the ordinary neurasthenic symptoms were worse, but in a few days they returned to their usual condition. The trouble seems to occur only in confirmed neurasthenia, but it is of itself of no bad significance and does not affect the prognosis. It is due, he believes, to a vaso-motor paralysis, but there is also some action of the glandular elements; there is a rupture of the blood-vessels in the capillary net-work beneath the glandular epithelium, and the blood mixes with the glandular secretion and is expelled with

it through the excretory canal of the gland.—*Boston Med. and Surg. Journal*.

Hospital Enterprise.

A hospital in Omaha is distributing broadcast a catchy circular, which reads in part as follows: "Accident insurance is a good thing. Insurance against ordinary sickness is a better thing. Both in one is the best thing. Do not wait until sickness or accidents come to you before taking out a membership certificate entitling you to free admission, bed, board, nursing, medical and surgical care in case of accident or sickness in the Methodist Hospital, of the Omaha Hospital and Deaconess Home Association, of the Methodist Episcopal Church. A two-edged sword cuts both ways, and accomplishes its mission in either direction. So does your membership fee. If you have occasion to use the hospital as a member you have the first right to accommodations, above any other class of patients, and you will be most tenderly cared for. If the Lord spares you in perfect health, your money will assist the institution in caring for some one else not able to pay. It thus becomes a sweet charity whose fragrant memory will follow you all your life." The cost of membership is \$10 a year in advance. The payment of \$250 in advance makes one a life member entitled to continuous free treatment for himself or, "if the Lord spares him in perfect health," for some one else of whom Providence is not so careless.—*Charlotte Med. Journal*.

Roentgen Rays in Diagnosticeating Arteriosclerosis.

Carl Beck (*N. Y. Med. Journal*, January 22, 1898) says the proofs of the immense usefulness of the Roentgen rays in surgery are overwhelming. Their value in internal medicine has not as yet been made so apparent; but with better interpretation of the shadows, the significance of the rays in the obscurer ailments will be convincing to the mind of the most sceptical. A striking example of this may be found in the diagnosis of arteriosclerosis. According to the text books on internal medicine, the

thickening of the tunica intima cannot be recognized if it is confined to a small area or to single foci. It hardly needs to be emphasized how important it is to know whether, in a given case of sclerosis of the radial artery, there exist foci in other vessels besides. Nor can it be indifferent what the number of these obstructive foci is, and whether an aorta or a temporalis is concerned. If such foci are recognized at an early stage, proper prophylaxis can accomplish a great deal in preventing secondary disturbances. The prognostic significance of an exact knowledge of the condition of the arteries is also evident. The Roentgen rays give us a most reliable method of ascertaining the condition of the vessels, and this in nearly every part of the body.—*University Med. Magazine*.

Blepharitis.

The good effects of picric acid in eczema suggested to Professor Page, of Amiens, the idea of employing it in blepharitis, an affection which might be regarded as eczematous, and for the last three months the learned professor has applied this treatment in the cases above mentioned with constant success. After removing the dried secretions with a solution of boric acid, he paints, every two days, the edges of the lids with a 5, 8 or 10 per cent. solution of picric acid. This little operation, which the patient can easily do for himself, attenuates considerably the itching and burning sensations, and effects a rapid healing of the ulcerations. The solution leaves a yellow stain on the lids, but it does not last long, and in any case it is not so apparent as that caused by nitrate of silver, tincture of iodine, or the violet of methyl. The solution of picric acid is in no way dangerous to the conjunctiva.—*Med. Press and Circular*.

Lactic Acid in a Case of Arthritis Deformans.

Zoltavine (*La Médecine Moderne*, September 18, 1897) used lactic acid with success in an old case of arthritis deformans, administering daily ten drops of this drug upon an empty stomach, and allowing no food for an

hour and a half afterward. The disease had lasted for ten years, and for a year the patient had not been able to leave her bed. The dose of the medicine was gradually increased to forty drops daily. At the end of three weeks the action of the acid was manifest; the articular pains were so relieved that the woman was able to get out of bed and walk a little; the circumference of the joints diminished slightly; nutrition improved and abdominal pains disappeared. No other medicine was used, and the only external treatment was a light massage. Improvement continued until the patient, at the time of writing, could walk without a cane and attend to her ordinary occupations.—*Med. News.*

A FOOD FOR DIARRHEA IN INFANTS.—

The difficulty of feeding children suffering from diarrheal troubles has long been recognized by pediatricians. In many of these cases milk must be entirely discarded and replaced by other foods. The idea not long ago occurred to a German chemist that by converting the albuminous constituents of milk into albumoses they would be not only more readily absorbed and assimilated, but would also be less irritating to the mucous membrane of the alimentary tract. It was further found that by addition of a small percentage of an astringent (tannic) in firm organic combination with the albumoses base, an unirritating and nutritious food product is secured, of especial value in diarrheal affections. This product has been introduced under the name of lacto-somatose, and has been thoroughly tested in the medical clinic of Bonn and other institutions in Germany.

The results thus far obtained are so satisfactory as to encourage extensive use of this astringent nutritive preparation in all diarrheal troubles where other foods are not tolerated.

In the *Atlanta Medical Journal* of February, 1898, Dr. Herman D. Marcus, late Lecturer on Materia Medica at Medico-Chirurgical College, Philadelphia, Pa., says: "In fifty-five cases of uterine and vaginal diseases I have used Micajah's Medicated Uterine Wafers with distinctly favorable results, as follows: Thirty-eight were cured, nine greatly improved, and the balance unimproved, a percentage of cures larger than from any other form of treatment. Some twenty-five or thirty cases of leucorrhea treated with these wafers showed cures in three to six weeks." (A sample of Micajah's Medicated Uterine Wafers will be sent free by addressing Micajah & Co., Warren, Pa.)

Translations.

NOTES ON THE HISTORY OF MEDICINE.

TRANSLATED FROM DE BORDEU.

BY THOMAS C. MINOR, M.D.,
CINCINNATI.

THEOLOGICAL PHYSICIANS.

I.

Union of Theology and Medicine—Description of Old Age Drawn from Ecclesiastics—Medicine Before the Flood.

Medicine since the earliest periods of time has been intimately connected with religion; this honor cannot be taken away from our art.

The church, in ages much more happy than the present, charged its ministers to study and even practice the principal parts of healing; this is why it is so advantageous to us to seize the proof, in order to expose the motive of this union. Medicine and theology are of the same nature.

"Remember thy Creator in the days of thy youth, before the sun, the moon and the stars are obscured, before the clouds return after the rain."

Before the heat, that is the sun of the living body, loses its sprightliness and its fire, and ceases to clear and animate all the organs; before the brain, that presides over the body like the moon on the earth, grows feeble in its functions, and that the viscera, that are like the stars, lose their activity, so necessary to life and to health; before fluxions and catarrhs succeed each other without interruption.

"When the guards of the house commence to tremble the strong shall shake; those that have been used to grind shall be reduced to few in number and grow idle, and those who would look through the windows shall be covered with darkness."

When your arms, your natural guardians, fail in strength; your limbs, made to sustain you, can no longer carry, but will bend under the weight of your enfeebled body; the number of

your teeth, that are destined to grind nourishment, shall be sensibly diminished, those that remain being loose and losing their enamel; your eyes, the sentinels of the body to warn you of danger, shall be obscure, growing dim, watery, without light.

"The gates of the streets shall be closed, the voices of those accustomed to grind shall be low; when taken away is the song of the birds; the daughters of harmony shall become deaf."

The natural ways by which the body is cleansed shall be closed or lose their energy; the organs of the voice will lose their flexibility, and even the use of speech be interdicted; you will not enjoy the necessary sleep; you will not awaken at the dawn of day and enjoy no tranquillity at night; the ears that have been delighted by beautiful sounds transmitted to the soul as if by most melodious instruments of music will no longer serve to enchant and amuse you; you will be plunged into deep and mournful silence.

"The places of the most high shall not be spared, and they shall tremble in the road. The almond tree shall flourish, the grasshopper grow fat, and the caper bush dry."

The body will bend and curve on itself, the more so as it is well formed and straight; one will no longer be able to move without danger. The hair will become white; the belly grow soft and fat; the beard, the sign of force and heat, shall fall.

"Before the silver cord be loosed, before the golden bowl is drawn out, before the water-jar is broken on the fountain and the wheel is destroyed on the cistern, the dust shall return to the earth from whence it came; man shall enter the bosom of God, and the wailers shall mourn for him in public places."

The spinal marrow that is white shall be loosened to all its extremities of sensation, and will no longer have sensibility; feebleness and paralysis will soon follow. The blood that follows its vessels' natural passages, going to revivify the body, carrying heat and vermilion color denoting life, shall stop and be congealed. The secretion of

urine will be suspended, either from the bladder, that is the water-jar destined to receive it, or from the kidneys, that are comparable to the ancient wheels or pulleys that drew water from cisterns or wells, and can no longer draw from the blood its urine, that will from hence stagnate and fall into corruption. The body will go back to its first existence of earth or a little dust, from which it was originally formed. The soul shall enter the bosom of the Eternal. Your friends shall think briefly of the history of your life, but they will soon grow silent, and will bid your memory their last farewell.

This description of old age, considered as a disease, is drawn from Ecclesiastics, freely rendered; it is, we may say, entirely medical or anatomical; it has always been interesting to those doctors who have read and commented on the passage in question. It may well serve as a foundation for some remarks, that, it appears to us, we may be permitted to make on the union of our ancient medical union with theologians. This union, that honors medicine, is founded on the connection that it has, by its nature, with theology.

The latter, always occupied by holy things, has not disdained to sometimes bear the name of *medicine for the soul*; it even extends its laws to corporal functions, the principal infirmities of medicine; but we doctors are also obliged to study the functions of the mind, and we, too, permit ourselves to do this when it is convenient and necessary, as far as our feeble light will permit us to see.

The Holy Bible mentions no physician before the deluge, although it does not fail to mention the metallurgist, musician, hunter and soldier, as well as those who built cities. Many authors have claimed that Adam knew something about medicine, as well as all the patriarchs before and after the deluge.

In those earliest days of creation there were many shepherds and prophets, when divine inspirations were interpreted from dreams; this leads us to think they, too, were doctors. They cultivated empiricism, doubtless, and

were the first masters of the Chaldeans, Assyrians and Egyptians.

Need we dwell on the names Adam gave to all the creatures created by the hand of God? It is only a proof of his knowledge as a scientist, physicist and dogmatic physician. We may say as much for Noah, who arranged the different species of animals and separated the pure from the impure in the ark; and there, finally, was Jacob, who employed means to predict the different colors in his flocks.

All these things have been reported and commented on in order to prove that our earliest ancestors were well instructed in medical facts, yet we find their best science established on their knowledge of the use of foods and the method of preparing them.

They made bread, wine and cheese; they cooked their vegetables and their meats, and cultivated fruits; they gave their equals and inferiors the results of their reflections and their discoveries; the patriarchs were, then, all empirical physicians.

II.

Manner in which Joseph the Patriarch Mentions Physicians — They are Promised in Ecclesiastics—It was Necessary to be a Physician in Order to be a King among the Jews—Passage from Isaiah on this Subject.

The manner in which physicians are mentioned for the first time in the Scriptures only tends to increase the natural modesty of the doctor; it is the chapter in which Joseph orders his servants, the physicians, to embalm the corpse of his father. Modern doctors would mulct Joseph's estate for a goodly sum for such service, not to mention the fact that, as a rule, they would stand higher socially than Joseph, which all tends to show that the condition of physicians has vastly improved since the days of the patriarchs. The doctor in medicine now looks calmly down on the trade Josephs of society, and as their superior, not their equal—at least he thinks so, although some of the Josephs may be foolish enough to think otherwise. Yet in mentioning doctors as slaves we must take into consideration the fact that all

officers of the great monarchs of the East, even to the present day, call themselves slaves to their king. This is all founded on the idea of the compliment that the Queen of Sheba made to Solomon, in telling him her valets, her slaves, or all those who served were only too happy to do so; it was claimed that the greatest officers of the crown were included in this happy list of valets.

Modern society bows down, as it did centuries and centuries ago, to power and wealth. The God of Mammmon, the golden calf, has still its myriad of worshipers in the present. One may apparently conform to the usages of polite society and seem to bow the knee to silly fashions and customs, but, at heart, the valet may really be the king. In the ordinary doctor's heart is a profound contempt for all those whose basis of reputation is founded on wealth and titles. Yet the Queen of Sheba humiliated herself before Solomon. She knew a good thing when she saw it, then as now, and caught on.

Now the gentle Joseph does not speak of his physician valets as the servants of Pharaoh, but as his own valets. Let us hope these embalming physicians were of a particular order of Hebrews, and that those who saw the sick belonged to the priesthood as well as Joseph, who arrived after his performance of wonderful miracles at the highest degree of honor, and also acquired the right to speak as a king of Egypt. The gentle Joseph was, *sans doute*, a real Hebrew.

Yet the Scriptures console us by the opinions of Joseph—opinions that modern historians have passed in silence, either from timidity and cowardice or from conscientious scruples. The Eternal takes the name of *physician to the people of Israel* in Exodus, and this is the *second time* doctors are mentioned in the Scriptures.

Our books are likewise ornamented with sentences from Ecclesiastics, that our medical predecessors have proudly exhibited to all the world. "Honor the physician by reason of his necessity, for it is the All High who created him; all medicine comes from God, and it

shall receive presents from kings. The science of the physician shall raise him to honors, and he shall be praised before the great. It is the All High who has produced from the earth all that can cure, and a wise man will not withdraw himself from the use of medicines."

We do not believe it necessary to separate these passages from those preceding them in the same place in the Scriptures, and which may appear to be less favorable to medicine: "Be not greedy at the feast, and eat not all of the meats; for a quantity of food causes sickness, and those that eat too much have colic; intemperance has killed many; but the sober man shall live for a long time." These are the lessons that one cannot discuss in doubt; they belong, beyond question, to medicine united with theology, that consecrated and ennobled the doctor in medicine. All of certain theological precepts are medical; they are the natural basis of the commandment between temperance and gluttony.

The patriarchs, according to a modern historian, and the princes of the Jewish people "shall continually watch over those they govern, care for them in their greatest necessity and remedy their ills." This was the reason of the exclusion of the commandments from the crown when it had no knowledge of disease and its remedies. "Make me not your king," says Isaiah (chapter iii, verse 7); *I am not a physician.*"

There can be no doubt that the princes among the Jewish people watched over those they governed then as now; but it does not appear certain these princes were excluded from the throne. Although they had no knowledge of disease nor its remedies, it will be assuredly most glorious that we, the inheritors of the Jewish throne, were obliged to take the most complete and systematic courses of medicine.

This passage from Isaiah, however, proves nothing; the passage is even mutilated, like most others, in its Christian translation. "He shall answer at that day, and he shall say, I am not a physician, there is no bread in my house, there are no raiments; make me not a prince of the people."

Reasoning like the historian we have mentioned, we might conclude, as did Isaiah, that this was a reason for the exclusion of the commandment and the crown, since there was no bread in the house, and since there was no clothing. So, in order to be a king, according to this, one needed only to be a baker or a tailor. Besides, the author criticised has taken no heed of the past. That the note of Isaiah he cites is preceded by the following verse: "A man shall seize his own brother, who shall be servant to his father, and shall say to him, thou hast vestments; be our king." Isaiah predicted a period of desolation in this chapter. God would abandon his people; remove from them all statesmen, soldiers, prophets, sages, advisers, architects and orators; he would give them infants for kings and children to govern them; effeminate men would lead them; old men and old men would be at war. Finally, "a brother shall seize his own brother, who shall be the servant of his father, and say to him, 'Thou hast vestments; be our king!'" This brother will answer, "I am not a physician; there is no bread in my house; there are no vestments. I am not a prince of the people."

All this is a frightful picture of upheaval of society. Children command the weak, govern the strong, making slaves of their fellow-men, as, at present, wealth rides over the poor, the rich growing richer through corporations and trusts while the poor labor—all men being equal and children of the High God. In the end, hunger, nakedness and distress succeed; then comes disorder and mutiny. Millionaires and their descendants are shivered in the dust. History ever repeats itself. Those harassed by oppression will ever rebel; misery carried to excess will ever mutiny. When there is no bread for those to give who should give, there will be no physicians to heal, there will be none to give raiment, there will be none to nourish, to clothe, to cure.

This prophecy does not prove that there will be no physicians for the Jews, for as the historian has remarked, "There was reason for the exclusion of the commandment from the crown, since

the latter had no knowledge of disease and its remedies."

King Asa, whose piety is praised by the Scriptures, as Bossuet remarks, was a man who thought more in his mind of his physicians and their so-called science than of his God. There is no reason to think that Asa was a physician; nevertheless, he trusted in the doctors, and not in his God. We are told that Asa "slept with his fathers," and he died of gout, too.

[TO BE CONTINUED.]

The Mental Side of the Sense of Hearing.

The *Laryngoscope* draws attention to the great difference which exists between the capacity of different individuals of appreciating the various qualities of sound as shown by the tests applied to telephone operators. It has been found that quantitative tests alone are illusory, since the inability of the operator to detect the quality of sound is

often the cause of delay and confusion. The difference between two operators may in fact be essentially a psychological one, for although the acuteness of each may be equal the mental processes of one operator may be infinitely more rapid and accurate than those of the other. A simple test some applied is as follows: The superintendent has his own telephone connected simultaneously with those of a number of operators, and calls out, at shorter or longer intervals between each, a written series of numbers, without repetition. These the operators record on paper and the lists are then compared with the original. This is a criterion which clearly tests the various faculties involved. Unfortunately it would seem to complicate the personal factor of the individual with that of the instrument engaged.—*Charlotte Med. Journal.*

DIABETES has been treated successfully with a diet of pure buckwheat flour.—*Med. Summary.*

A Remedy in Nervous Disorders when Characterized by Melancholia.

—Mode of Exhibition.—

The "Reference Book of Practical Therapeutics," by Frank P. Foster, M. D., Editor of *The New York Medical Journal*, which has recently been issued by D. Appleton Co., of New York City, contains an article of which the following is an excerpt, which we feel expresses the consensus of medical opinion as adduced by actual results: "Antikamnia is an American preparation that has come into extensive use as an analgetic and antipyretic. It is a white, crystalline, odorless powder, having a slightly aromatic taste, soluble in hot water, almost insoluble in cold water, but more fully soluble in alcohol.

* * * * *

"As an antipyretic it acts rather more slowly than antipyrine or acetanilide, but efficiently, and it has the advantage of being free, or almost free from any depressing effect on the heart. Some observers even think that it exerts a sustaining action on the circulation. As an analgetic it is characterized by promptness of action and freedom from the disagreeable effects of the

narcotics. It has been much used, and with very favorable results in neuralgia, influenza and various nervous disorders characterized by melancholia. The dose of antikamnia is from three to ten grains, and it is most conveniently given in the form of tablets."

We may add, that the best vehicles, in our experience, for the exhibition of antikamnia are Simple Elixir, Adjuvant Elixir or Aromatic Elixir, as also brandy, wine or whiskey. It can also be readily given in cachets or capsules, but preferably tablets, as well as dry on the tongue in powder form, followed by a swallow of water. When dispensed in cachets or capsules it should be put into them dry. Antikamnia tablets should be crushed when very prompt effect is desired and patients should always be so instructed. The conditions of the stomach frequently present unfavorable solvent influences and they can be thus overcome.

—*Notes New Pharm. Products.*

In Pneumonia where there is Restlessness.

R Antikamnia (Genuine)..... 3 ij
Tinct. Digitalis..... 3 iss
Syrup Doveri..... 3 iij
Mx. Sig. :—Teaspoonful every 3 to 6 hours.

In Painful Dysmenorrhoea.

R Antikamnia (Genuine)..... 3 j
Brom. Potass..... 3 ij
Elix. Auranti..... 3 ij
Mx. Sig. :—One or two teaspoonfuls every hour in water.—*Druggists' Clinical Record.*

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is "in the eating," is



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In Pneumonia where there is Restlessness.

R Antikamnia (Genuine)..... 3 ij
Tinct. Digitalis..... 3 iss
Syrup Doveri..... 3 iij
Mx. Sig.:—Teaspoonful every 8 to 6 hours.

In Painful Dysmenorrhœa.

R Antikamnia (Genuine)..... 3 j
Brom. Potass..... 3 ij
Elix. Aurantii..... 3 U
Mx. Sig.:—One or two teaspoonfuls every hour in water.—*Druggist's Clinical Record.*

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Original Articles.

BERI-BERI.

BY OLIVER D. NORTON, M.D.,
SURGEON UNITED STATES NAVY.

SYNONYMS.

Pan-neuritis endemica (Baelz); Barbiers (India); Loempoe (Java); Kakké (Japan); Maladie des sucres (French Antilles); Bad sickness (Ceylon).

ETYMOLOGY.

Barbiers is a vernacular Indian term of unknown origin. Kakké signifies an affection of the legs. The origin of the word beri-beri is obscure; it is the name given to the disease by the Malabars. Beri is Singhalese for weakness, and, by iteration, implies great weakness. Others derive it from the Indian word bheri, meaning sheep, from the fancied resemblance of the gait of the beri beri patient to that of a sheep.

DEFINITION.

A specific endemo-epidemic form of multiple peripheral neuritis, which, in addition to the usual phenomena of that condition, is characterized by a special liability to the implication of the phrenic and pneumogastric nerves, the cranial nerves as a group and the higher nerve centres being practically exempt; and also by a marked liability to varying degrees of edema in the connective tissues, and of effusion into the serous sacs of the thorax and abdomen (Manson).

HISTORY.

In a Chinese medical work, written in 1321, and afterwards reprinted in Japanese, a remarkably clear account of

the disease is given, in which the author traces its existence to the time of the Emperor Hwang-Ti, 2697 B. C. It is mentioned by Strabo and Dion Cassius as having broken out in the Roman army during the latter's invasion of Arabia in 24 B. C.

GEOGRAPHICAL DISTRIBUTION.

The disease is found in both hemispheres. In the Eastern Hemisphere it is met with in India, Persia, Arabia, China, Japan, Sumatra, Borneo, the west coast of New Guinea and the eastern part of Java; in Ceylon, especially at Trincomalee and Kandy; in India, in a strip of country, a hundred miles broad, on the coast from Ganjam to Masulipatam. It is also found in Mauritius, Reunion, Zanzibar and the Congo Valley.

It has been epidemic at various times in the Western Hemisphere, in Cuba (an epidemic having made its appearance recently among the reconcentrados), Guadeloupe, Cayenne and Paraguay. It is endemic on the coast of Brazil.

It is not uncommon for the disease to be brought to the United States from the tropics. A Brazilian war vessel, not many years since, imported several cases into New York. More recently (in 1881 and 1889) epidemics of the disease have prevailed among the New England fishermen on the Newfoundland banks; they were described by Putnam, of Boston. In 1894 there was an outbreak among the inmates of the Richmond Asylum in Dublin. On September 15, 1896, two cases, both natives of India, received from a sailing vessel hailing from Calcutta, were admitted to the Presbyterian Hospital in New York. Peterson, of New Bedford, has met with eight cases among the

crew of a whaler within the past two months.

The disease is readily transferred to ships. Thus, cases of beri-beri have repeatedly occurred on board English and Dutch men-of-war and transports. Four cases developed on board the U. S. S. Brooklyn, while making a long passage under sail from Honolulu to St. Thomas in 1889.

A striking instance, showing that a vessel may become infected with the disease, occurred on the steamer "Merapi," which served as a transport for the Dutch soldiers suffering from beri-beri during their removal from Sumatra to Batavia, Java. Despite thorough disinfection and temporary putting out of service of the vessel, the disease again made its appearance when the ship was subsequently employed on other duty. It was only after renewed disinfection and careful cleansing of the utensils used by the former patients and of the places occupied by them that the disease disappeared.

In Japan it was limited, until fifty years ago, to the coast towns, but it is now met with practically all over the island. In China the disease is not as frequently seen as formerly.

ETIOLOGY.

The causation of the disease has been variously ascribed to malaria, scurvy, anemia, improper diet, intestinal parasites (*anchylostomum duodenale*, *trichocephalus dispar*), and to a specific hematozoon, but sufficient proof is wanting to sustain these views.

The conception of improper diet as the causal factor in the production of the disease rests principally upon the observations made in the Japanese navy. Upon the initiative of Dr. Takaki, a change of diet was made in 1883, with the result that the morbidity from beri-beri was brought down from 1,286 cases, in a force of 5,439 men, to 41 cases in 1885, and to three cases in 1886. Since 1887 there have been practically no cases.

That this decrease, however, was not solely due to improvement in the diet alone, but also to other hygienic measures, was shown by subsequent exper-

iences in the Singapore jail, where an improved diet failed to abate the prevailing epidemic of beri-beri.

The cause of the disease is as yet unknown, but there is good reason for assuming that it is due to a germ which flourishes under conditions of high atmospheric moisture and extreme thermometric ranges, and which can be transferred from one place to another and multiply.

Grimm, a recent observer, is of the opinion that, whatever the nature of the noxa, it is ingested with the food. The bacteriological researches undertaken by Peckelharig and Winkler on behalf of the Netherlands Government are not conclusive, their claims having been contested by Eykmann, Meudes, Fiebig and Scheube.

Accessory causes of beri-beri are: Sudden fall of temperature, fatigue, malarial fever, diarrhea, dysentery, surgical injuries, and other disturbances tending to lessen the resistance of the body; a diet of fish and rice, overcrowding, filth, and residence in a low, damp district.

Direct infection of the healthy from the sick does occur, but only to a limited extent.

The disease is rare at the extremes of life; it is most common between the ages of fifteen and forty.

The male sex is more liable than the female, but parturient women seem to be especially susceptible.

Indoor occupation and much standing in water—mining, fishing, plowing rice fields—are favorable to its development.

Those who have been attacked by the disease are specially liable to its recurrence. Of Scheube's cases, 42 per cent. were relapses.

The morbidity among the native East Indian Dutch troops is estimated at one-half of all diseases. The European Dutch troops also suffer severely, a fact I observed while visiting the government hospital at Sockaboemi, Java.

The stage of incubation may, it appears, last for weeks.

Acclimatization is in some measure a preventive, yet the number of Europeans affected with beri-beri is very

small in comparison with the native contingent. In Sumatra the proportion is given as 1:100, while in Japan it is still more favorable to the Europeans.

PATHOLOGICAL ANATOMY.

Serous fluid is generally effused in the areolar tissues of the lungs, brain, heart, abdominal viscera, and skin, especially of the legs. The cavities, like the tissues, are filled with watery effusion. The blood is unusually dark and fluid.

The special lesions of beri-beri are degeneration of the peripheral nerves, and in some instances also of the posterior spinal nerve roots (Baelz, Scheube, Peckelharing and Winkler).

The degeneration affects most markedly the motor nerves, the phrenic (laryngeal branches), and the pneumogastric. It consists of a crumbling and gradual disappearance of the myeline and axis cylinder, so that nothing remains but the sheath of Schwann, surrounded by hyperplastic interstitial tissue.

The existence of connective tissue hyperplasia and the notable accumulation of nuclei in the neighborhood of the vessels have led Scheube and others to regard the initial lesion of the nerve as an inflammation, whereas Peckelharing and Winkler look upon it as a purely degenerative process.

The muscular fibres undergo a granular or vitreous degeneration, giving the muscles, which are sodden, a pale appearance. In the atrophic form they may appear dry and shining.

The heart muscle is usually found degenerated, and the autopsy shows a dilated and somewhat hypertrophied heart (left side).

SYMPTOMS.

Beri-beri presents itself in an acute and chronic aspect. The acute cases are sudden in onset. (On a Japanese vessel, with a crew of three hundred, in dock at Yokosuka, Japan, seventy were seized with the disease, and over twenty died, a large number of the cases developing during the night.)

In the chronic form the symptoms at the onset are usually ill-defined. The prodromal symptoms last a day or two in acute cases, and several days in the

milder cases; they are: Languor, tendency to fatigue on slight exertion, mental depression, increase of the pulse, feeling of numbness and stiffness in the legs, edema over the tibiae and ankles, in some cases headache, nausea, vomiting and diarrhea, but rarely fever. Then follow palpitation of the heart, precordial anxiety, increased frequency of respiration, weakness, especially of the legs, arms and hands.

The paresis affects, as a rule, first the muscles supplied by the anterior tibial and peroneal nerves, the muscles of the trunk and face being the least frequently attacked. In severe cases locomotion is impossible and incoördination marked. Muscular cramps are quite common. Paresthesia, taking the form of numbness, exist in the feet, legs, arms and finger tips. The patellar reflex is at first exaggerated, but soon abolished.

There is edema of the ankles, feet, legs, face and hands. This symptom, though rare in other forms of polyneuritis, is very common in beri-beri. It invariably begins at the ankles and over the crests of the tibiae, and rarely extends to the genitals. As in nephritis, it may involve the conjunctivae and glottis. At times there is a marked localized edema, quickly appearing and as quickly subsiding. (As an illustration of this phenomenon, I have taken from my notes on one of my cases the following: Left leg and thigh began to swell rather suddenly; circumference of the left thigh twenty inches, of the right thigh sixteen inches, left calf thirteen inches, right calf ten inches; swelling subsided during the night.)

Muscular hyperesthesia is a prominent symptom, and is especially noticeable in the gastrocnemii.

The urine is diminished in quantity, which increases as the edema diminishes; it is of high specific gravity and occasionally contains albumen. The bowels are usually somewhat constipated.

Anesthesia of the skin is generally an early symptom, and, as a rule, begins in the legs. There is a visible palpitation of the precordial region, but the heart sounds are normal.

After a variable number of days, the edema subsides and the muscular atrophy of the legs becomes apparent. Restoration is very slow; the patient has great difficulty in moving about, if, indeed, he is at all able to do so.

After weeks or months recovery may ensue, the muscles regaining their normal volume and the knee-jerk re-appearing.

Reaction of degeneration is always present.

Beri-beri shows but slight tendency to produce anemia.

Numerous deviations from the case above described may exist, and the symptoms may be intense or mild. In very severe cases death may occur within twenty-four hours from the beginning of the attack from diaphragmatic and intercostal paralysis. In a fatal case that came under my observation while at sea, the symptoms, mild at the onset, increased in severity until the fourteenth day, when the patient died in great dyspnea and intense suffering, with tumultuous heart and throbbing carotids—a condition known among the Japanese as “shiyoshin,” a greatly dreaded and nearly always fatal train of symptoms.

Manson recognizes four forms of beri-beri:

1. The wet or dropsical beri-beri, where edema is the most prominent symptom.
2. The dry, paralytic or atrophic beri-beri, where paralysis and atrophy predominate.
3. Mixed beri-beri, where both paralysis and dropsy co-exist in a moderate degree.
4. Pernicious beri-beri, where the cardiac and respiratory symptoms are most intense and the case proves rapidly fatal.

According to the course of the disease, a division may be made into acute, chronic, relapsing and recurring. These terms only indicate phases, but not different forms of the diseases.

DIAGNOSIS.

An epidemic of peripheral neuritis is probably one of beri-beri. When, in the beginning, the symptoms are indistinct, the subsequent rapid develop-

ment of edema and paresis, in the absence of any other cause, *e.g.*, nephritis, points to that disease.

Malarial neuritis of a character simulating beri-beri is exceedingly rare. It is generally confined to one nerve; besides, paresis, muscular atrophy and cardiac disturbances are absent. If the plasmodium of Laveran is found, and the disease responds to quinine, the diagnosis is cleared up; but it must be borne in mind that both diseases may co-exist.

In alcoholic neuritis we have, besides a history of drinking, gastric catarrh and mental disturbances. Edema is infrequent in uncomplicated cases. It is possible, however, for malaria, beri-beri and alcoholic neuritis to be present in the same patient.

In lathyrism, due to the poison of the lathyrus sativus, there is no edema, anesthesia or cardiac disturbance.

In trichinosis the pain is principally in the muscles of the trunk, head and neck. Violent gastro-intestinal paroxysms precede the muscular pain. Cardiac trouble and paresis are absent.

PROGNOSIS.

In general, it may be said that the nearer the Equator the more numerous the hydropic forms and the greater the mortality. The mortality is always high when the patients continue to live under the same conditions and in the same place as that in which the disease was contracted. The lethal complications are respiratory and cardiac failure and bronchitis.

PROPHYLAXIS.

Careful attention should be paid to hygiene in beri-beri districts. The dwellings should be dry and well ventilated, built high above ground and not overcrowded, especially in the sleeping quarters.

In ships manned by native crews care should be taken to keep the fore-castle dry, clean and well ventilated. Overcrowding and overheating is to be avoided. Wet clothing should not be hung up to dry in the sleeping quarters, and the men should be kept on deck as much as possible.

The diet should be generous and varied. Wheat and barley should be largely substituted for rice.

When a case has been discovered in a jail, mine or on board a ship, prompt measures should be taken to prevent its spread. Every person should be examined for the symptoms of the disease—edema, patellar reflex, muscular hyperesthesia—and all suspicious cases be promptly removed.

When a case has occurred on board a ship, there should be a thorough fumigation, the quarters scrubbed, ventilated and whitewashed, and, if practicable, the men should be sent elsewhere to sleep. In all cases the dietary should be looked into and supplemented, if found to be insufficient.

TREATMENT.

The patient should at once be removed, if possible, from the house and district in which the disease was acquired, to a mountainous district, or sent to sea, as was done with the cases in Singapore. A complete change of diet is indicated when the patient has been living principally on rice and fish; beans, barley, wheat and onions, with fresh meat, being substituted. The treatment of the Dutch troops, both European and native, in the government hospital in Java, consisted during my visit to that country in 1887, principally of a generous diet of soup composed of meat and vegetables. As the site of the hospital was in a salubrious spot in the mountains, the patients made, as a rule, good recoveries. In Japan a small bean called "azuki" (*Phaseolus radiatus*) is used as a diuretic by beri-beri patients.

The treatment by drugs is symptomatic. The bowels are kept open by small and repeated doses of a saline cathartic, which is combined with digitalis in cases of heart debility. When the disease is subsiding, the aperient should be discontinued, and a tonic of iron and quinine substituted. In mild cases the patient should be kept out of doors whenever the weather will permit; in severe cases the patient should be kept in bed on account of the cardiac phenomena. After the muscular hyperesthesia has disappeared, strychnine, faradization and massage are indicated.

nine, faradization and massage are indicated.

During the paroxysms of muscular cramps and pain, anodyne liniments or hot bottles may afford relief.

When cardiac failure threatens from over-distension of the right heart, as evidenced by great dyspnea, cardiac distress, palpitation and cyanosis, nitroglycerine in full doses and a quickly-acting cathartic like croton oil or elaterium should be given. If these measures do not afford relief, resort must be had to venesection, taking not more than five or six ounces of blood at a time, since the operation may have to be repeated.

If hydrothorax or hydropericardium is excessive, aspiration may become necessary.

When nausea and vomiting exist, it is to be treated symptomatically. The stomach is to be kept at rest by rectal alimentation, a little opium or tannin being added to the enema.

Prevention of Conception by Division of the Tubes.

Kehrer (*Centralbl. f. Gyn.*, 1897, No. 31) recommends the division of the tube in order to prevent conception in patients suffering from chronic and wasting disease. Also in case of extreme pelvic contraction, when delivery would have to be accomplished by Cæsarean section. For, the author holds, it would be far more rational to prevent conception in this way than to perform abortion after pregnancy had occurred.

By simple division of the tubes the desired result can be accomplished without removal of the ovaries or induction of the climacteric disturbances.

After experimenting upon rabbits, Kehrer found that neither hydrosalpinx nor pyosalpinx followed the operation, as might have been supposed.—*University Med. Magazine*.

OLD and new school authorities concur in the statement that not less than five nor more than seven drops of the mother tincture of thuja, twice a day, will give relief in every case of excessive seminal emissions.—*Med. Times*.

ANATOMY OF THE BONY ORBIT.¹

BY C. W. TANGEMAN, M.D.,

LECTURER AT THE MEDICAL DEPARTMENT OF THE
UNIVERSITY OF CINCINNATI; SURGEON TO THE
GERMAN PROTESTANT HOSPITAL.

Gentlemen:

It is not our intention, in this series of lectures, to teach the science of ophthalmology in its widest sense, but rather discuss briefly those diseases of the eye that are of greatest importance to the student of medicine and to the general practitioner. To thoroughly understand and systematically study diseases of the eye and its appendages, it is necessary that we begin with the bony anatomy of the orbit.

Text-books on diseases of the eye treat but briefly the subjects of anatomy and physiology; and while it belongs apparently to my worthy colleague the anatomist, no course of lectures can start properly without a thorough presentation of the anatomy of the bony wall of the orbit. The two large cavities occupying the upper portion of the facial cranium are called the orbits. In man they have the shape of four-sided, irregular pyramids, with their bases pointing forward and slightly outward. The walls are perforated by the foramina which connect it with the surrounding cavities of the face and cranium.

Seven bones enter into the formation of the orbit, namely, the frontal, the sphenoid, ethmoid, superior maxilla, malar, palate, and lachrymal. The three former are common to both orbits. The orbit has four walls, viz., floor, roof, and inner and outer walls. The two inner walls are nearly parallel, while the two outer walls are nearly at right angles to each other. The arrangement of the bones is instructive, for we notice that there is always more than one bone entering into the formation of a wall, and all of the sutures and junctions are deeply serrated, apparently for the purpose of offering greater resistance to blows and injuries.

If we study the appearance and shape

of the roof separately we will soon observe that it can hardly be accurately compared to the plane surface of a pyramid. It is arched in passing from before backward. The sides slope gradually, making it difficult to recognize the boundary lines laterally between the roof and the walls were it not for certain sutures. It is formed by the horizontal portion of the frontal bone and the lesser wing of the sphenoid. In front we find the roof exceedingly strong and thick, which is due to the supra-orbital ridge—simply a thickening of the anterior portion of the frontal bone. Then as we pass backward to the dome of this arch the bone becomes so much thinned that it is translucent, and in rare cases the ossification may even be complete. In old age it is not at all infrequent to find openings in this region due to a resorption of the bone, which brings into direct contact the contents of the orbit and the meninges of the brain. Injuries to the orbit in this region, as by an umbrella or pencil thrust, often prove fatal, since the brain and its coverings are so poorly protected.

The first point of interest belonging to the roof we find at the upper and outer angle of the orbit. It is the depression for the reception of the lachrymal gland, and is therefore called the fossa lachrymalis. It is a depression in the bone as if made with the thumb just behind the free margin of the orbit. The gland is held in the depression by bands of fascia, off-shoots from the dura mater. About midway between the outer and inner angle of the orbit, four or five millimeters from its margin, there is a slight depression called the fossa trochlearis; in this depression there is lodged a loop or pulley made of dense connective tissue, through which passes the tendon of the superior oblique muscle. At this point the superior oblique muscle changes the direction of its course; it passes directly forward from its attachment at the optic foramen, passes through the tendinous ring, and then turns outward and backward to be inserted into the upper, outer and posterior quadrant of the sclerotic coat of the eye-ball.

At the inner third of the orbital

¹ Lecture delivered at the Medical College of Ohio.

arch is a notch (sometimes converted into a foramen by a bony process) called the supra-orbital notch, or foramen, as the case may be. It transmits the supra-orbital artery and nerve to be distributed to the upper part of the face and head. The median or internal wall, which represents nearly a plane surface, is made up of three bones, the ethmoid, sphenoid and lachrymal. In some cases the process of the superior maxilla also enters into the formation of the inner wall. This is undoubtedly the thinnest wall, and if it were removed we should enter directly into the nasal cavity. Anteriorly there is a slight depression about three or four millimetres from the anterior margin which lodges the lachrymal sac. It is important to remember the anatomy of this region, since the surgeon is occasionally called upon to operate on structures found there, and while we merely refer to the subject in this connection we will again take it up in the proper place. This plane surface also contains two small openings, the anterior and posterior ethmoidal foramina. The anterior gives passage to the anterior ethmoidal artery which supplies the ethmoidal cells, the frontal sinus, and the dura mater, and then communicates with the cranial circulation through small meningeal vessels. It also transmits the nasal nerve. The posterior gives passage to the posterior ethmoidal artery, which sends one branch to the meninges, and gives off some nasal branches. A fracture of this wall permits the entrance of the air into the cellular tissue of the orbit and under the conjunctiva, and gives distinct signs of emphysema.

The floor of the orbit is strong, sloping forward and backward from about the median line. In front it is separated from it by the infra-orbital fissure. It presents the shape of a triangle with the apex pointing backward and a little to the median line. Three bones enter into its formation—the orbital surface of the superior maxilla, the orbital surface of the malar, and a small portion of the palate bone. At the inferior and internal angle, formed by the union of the lachrymal bone and the process of the superior maxilla, we have the lachrymal

groove and canal. A little external to this is found a depression for the attachment of the inferior oblique muscle, which passes outward and backward to be attached to the inferior, outer and posterior quadrant of the sclerotic coat. In the floor, running before backward, is seen the infra-orbital groove, which occasionally is present as a foramen. Through it passes the infra-orbital nerve, sending filaments forward to muscles of the lower eyelid, nose and mouth. It also gives passage to an artery by the same name (a branch from the internal maxillary), sending a supply of blood to the inferior rectus, inferior oblique, and the lachrymal gland in the orbit and to the lachrymal sac and inner angle of the orbit on the face. The external or lateral wall, as it is called, is by far the strongest and thickest. The bones vary from one and one-half to two millimetres in thickness. It is made up of two bones that are connected by a deeply serrated suture, the orbital process of the malar and the orbital process of the sphenoid. On its surface are found two small foramina transmitting unimportant vessels. Thus we have formed by the arrangement of these bones two quadrilateral pyramidal cavities with bases presenting forward. As we approach the facial openings of these cavities, the bones gradually thicken, and by the time we reach the orbital margin the pyramidal shape has given way to a distinct oval on account of the extreme thickness of the bones. Nature has made ample provision for the protection of the most sensitive organ of the body, not alone by the shape of the orbit, and the manner in which the bones are united, but by the great prominence of the supra-orbital ridge above, the orbital process of the malar bone externally and the bridge of the nose or nasal process of the superior maxilla internally.

There are a few important openings into the orbit that demand our consideration. The most important of these is the optic foramen, by some writers called a canal. It is found in the lesser wing of the sphenoid, and transmits the optic nerve, with its coverings or sheaths, and the ophthalmic artery. In fracture of the base of the skull the rent

in the bone not infrequently extends into the sphenoid bone, and involves the optic foramen. It appears as if in this direction there is least resistance, since a large majority of fractures of the base of the cranium pass through the optic foramen, and not infrequently disturb vision permanently by pressure on the ophthalmic artery, which interferes with the blood-supply to the eyeball.

The sphenoid fissure has the shape of a wedge, with the base pointing toward the apex of the orbit. It varies in size on the two sides, being larger, as a rule, on the right side than on the left. It is about twenty-two millimetres long, and is found to be entirely in the sphenoid bone, bounded internally by the body of the sphenoid, above by the lesser wing, and below by the greater wing.

By the participation of the frontal bone we have the formation of a fissure which is sometimes called the foramen lacerum anterius. Through this opening passes from the cranium to the orbit the third, the fourth, the sixth, and the ophthalmic division of the fifth nerves, and the ophthalmic vein returns from the orbit of the cranial cavity. This, as you see, is an important opening. If in case of fractures any of the structures innervated by the above nerve trunks are interfered with, you have a valuable guide as to the location of the fracture. During the repair of a fractured bone the material thrown out for the purpose of union may make pressure which will permanently interfere with the function of some or all of the nerve trunks.

The speno-maxillary fissure is found at the inferior external angle of the orbit, as its name indicates, between the orbital plates of the maxilla and the greater wing of the sphenoid. It transmits the infra-orbital artery a branch from the internal maxillary artery and the superior maxillary nerve.

The depth and diameters of the orbit may vary in different individuals, as well as the various races of man. The horizontal diameter of the orbit averages about forty millimetres, and the vertical diameter thirty-five millimetres. The average depth of the orbit in the white

race is about forty-four millimetres. These measurements are all slightly less in the female skull, but if we remember that the female skull is somewhat smaller in all its measurements, then the reason becomes very palpable why the measurements are only apparently smaller, while, in fact, accurate observation shows that the female orbit is proportionately larger than the male orbit.

In the monkey family, especially the orang-outang, the orbital cavity is in a completely closed space behind, while in man the infra-orbital fissure is often large and the orbit is not completely closed. Aside from the exceptions mentioned, the posterior or apex of the orbit is not bony. In these animals the pterygoid muscles act as a wall separating the contents of the orbit from the oral cavities below. The loss of bony protection is caused by the increase in size of the infra-orbital fissure.

If we study the formation of the orbit in vertebrates we are certain to meet with a large variation both with regard to form and relative position. In nearly all instances, like in man, it is more or less pyramidal in shape, and varies in depth according to size of the eyeball and the position of the ocular muscles. The greater the prominence of the eyeball, the more extensive the field of vision, because the range is not interfered with by the surrounding walls; and the smaller the space between the two eyes the more the one field of vision overlaps that of its fellow. The greater the divergence of the optic axes—as in the whale, for example—the smaller we find the field of vision. In man the optic and orbital axes run nearly parallel, which causes almost a complete overlapping of the one field of vision by that of its opposite fellow. In man the range of vision is increased by the marked recession of the external margin of the orbit and the very extensive movement of which the eye is capable, by means of its muscle system.

The bony, unyielding space just described is lined by a thin periosteum, sometimes called the periorbita, which may be traced into the optic foramen. The dura mater as it passes through the optic canal splits in two; the outer layer

blends with the periosteum and forms the periorbita; the inner layer forms the dura mater sheath of the optic nerve, and a capsule for the eyeball called Tenon's capsule. This forms a serous space around the eyeball, which communicates anteriorly with the anterior chamber through the lymph-canals at the iritic angle and posteriorly with the cranium through the subdural space. The layer of the dura mater which assists in forming the periosteum of the orbit is by no means confined to the walls of the orbit, but extends on to the face. It envelopes the contents of the orbit more or less completely as in a sheath, and gives off layers, that pass to the eyelids to fix them to the orbits called the tarso-orbital fascia, and bands that hold the lachrymal glands in position. It is very strongly developed in many of the larger mammalia, where the inferior wall of the orbit is not fully developed as seen above. In this region it sometimes contains muscular fibres. The periosteum also extends through the lachrymal canal to the nose. Should it become necessary to eviscerate the orbit on account of some form of malignant disease it is highly important that we remove all of the periosteum; this is not a very difficult matter, since it is loosely attached to the bones except at the margin of the various foramina and sutures, where it is firmly adherent. Around the optic canal this same structure is thickened to such an extent as to form a ligamentous ring, which gives origin to the various recti muscles, the superior oblique and the levator of the upper lid. An effusion of blood can cause a separation of the periosteum from the bone which may be well marked in the roof, since there are no sutures present.

It is important for the surgeon to be familiar with the surroundings of the orbit, since injuries of this region are not infrequent. Should we remove the roof of the orbit we would enter the cranial cavity; farther forward we enter the frontal sinus, and downward we pass into the sphenoid sinus, and into nose, down and outward into the antrum of Highmore, upward and outward into the cranium, and directly inward we pass into the nose.

The bones of the orbit are not infrequently the seat of disease, such as caries and necrosis. The most frequent situation of this disease is certainly the margin of the orbit, since it is usually the result of a fall or blow, and is often found in children of a scrofulous diathesis. In nearly all of the cases you will find that the disease begins as a sub-acute periostitis, and after continuing for a long time disease of the bone follows. The treatment of a case of this kind should be similar to the treatment of periostitis elsewhere, generally speaking. Proper drainage and cleanliness are very important factors. Should a piece of bone become detached the external wound must be enlarged sufficiently, so it can be removed. The treatment of caries and necrosis of the bones of the orbit must necessarily vary some from the plan of treatment of this same affection elsewhere, because of the close proximity of very important cavities. The establishment of thorough drainage and the regular use of the antiseptic fluids (such as a saturated solution of boracic acid or a solution of the bichloride of mercury, one grain to the pint) by means of a syringe, is all the local treatment that need be given.

ACUTE PERIOSTITIS.

This is found more frequently in the young than in the adult, and the symptoms are nearly always very acute. Pain in and around the eye is very intense; the lids are very much swollen, usually most marked in the upper lid; injection and chemosis of the conjunctiva are constant symptoms. The eyeball protrudes, but it is seldom pushed directly forward, mostly to one or the other side, because the disease does not involve the entire orbit, but is localized. A swelling on the inner wall of the orbit, for example, crowds the eyeball outward and curtails the movements of the eye inward. A continuation of this process for any length of time may involve the cellular tissue of the orbit and set up a general cellulitis. Where the disease has become diffuse there is an addition to the above symptoms—fever, general headache, delirium and stupor.

CHRONIC PERIOSTITIS.

In chronic periostitis the symptoms are all less acute, and the pain is generally deep-seated and worse at night. The periosteum eventually thickens, and is not infrequently the direct cause of exostosis of the orbit. The prominent causes of this disease are, first, syphilis, it being a late manifestation; rheumatism, and injuries. The prognosis very much depends on the type of the disease and the health of the patient. The movements of the eyeball may be interfered with permanently, atrophy of the optic nerve may follow, or the inflammation may extend along the meninges to the brain and cause death. In the chronic form there is danger of necrosis of the margin of the orbit, with a fistulus opening leading to the seat of disease.

Treatment.—When speaking of treatment the first consideration must always be the cause of the disease. If we find that syphilis is the cause the iodides and mercurials, in some form, are to be given; if due to rheumatism the salicylates are indicated.

CARIES AND NECROSIS.

Caries is most frequently found in children. It is nearly always found at the lower and outer orbital margin, nearly always following an injury to the bone. The above symptoms of periostitis are always present. If you find that an abscess is going to form you may make an incision and let out the pus. If the pus makes its own opening it nearly always discharges through the eyelid. If the roof of the orbit is affected it may endanger life, and if you resort to operative measures for the removal of the diseased bone great care must be exercised lest you open the cranial cavity. Tumors may spring from any portion of the orbital walls from the apex to the margin. The position of these growths may sometimes be diagnosed by the muscles or nerves that are involved and the direction of the protrusion of the eyeball. If the surgeon is called upon to remove the tumor from the orbit he must take into consideration its size, its rate of progress, its nature, and, by all means, its

situation. In exostosis of the ivory variety great care must be exercised lest by pulling them away some of the surrounding cavities be opened, especially the cranial, and fatal meningitis set in. Cases have been reported where the growth was so exceedingly hard that its removal had to be abandoned. If a bony tumor is small and remains stationary, it should not be interfered with; if it is increasing in size rapidly, causing protrusion of the eyeball, the best treatment is its removal. Cartilaginous tumors springing from bone are rare in the orbit.

While it is not within the scope of this lecture to touch upon all of the diseases of the orbit, yet it is very appropriate in this connection to refer to the surgical anatomy. You must be careful to differentiate between a tumor that arises from the orbital wall and one that springs from some one of the surrounding cavities. It is the former class that we refer to to-day. A thickening of the periosteum may give all the appearances of a tumor. There is considerable difficulty experienced sometimes to distinguish between a thickening of the periosteum and a sarcoma that springs from the periosteum. Bony tumors arising from the orbital wall, or periosteum, grow very slowly, have an ivory-like shell, and are more spongy in their interior. The origin of these growths is nearly always obscure, but may follow an injury. This latter variety of tumor is removed by the drill and chisel. It is an operation attended with no little risk, and may have to be abandoned because of the hardness of the tumor.

As you have seen, the orbit is especially constructed to protect its contents, and when we add to the strong orbital margin a thick covering of dense connective tissue, as the eyebrows, it would seem almost impossible to seriously injure the eye. But the exposed situation of the orbit renders it liable to fracture, and in not a few cases an injury to the margin of the orbit causes fracture which extends through the entire length of the wall to the base of the brain. Possibly the most frequent fracture in this connection is where the orbital portion of the malar bone is separated from its

junction through the line of suture, and driven directly backward; this injury is found in those cases where a man falls on the face from a considerable height. It appears that the symptoms of this injury are very characteristic — hemorrhage of the nose and mouth, a loss of the fullness of the cheek or malar prominence; and the line of fracture can be felt by running the finger along the margin of the orbit. If the infra-orbital nerve has been injured there is a disturbance of the sensation in the parts to which this nerve is distributed. The suffusion of blood under the conjunctiva is one of the most constant symptoms of fracture of the orbit.

Fractures are divided into the direct and the indirect variety; it is in the former that we diagnosticate the injury by the finger or the probe, since we can feel the fissure in the bone and the mobility of the fragments. In the large majority of the cases the damage done to the brain or the extension of the fracture to the base of the skull is of greater importance than the injury that the eye itself sustains. Where the orbital walls are shattered by the entrance of foreign bodies, as in gun-shot wounds, the treatment can be the same as in similar wounds elsewhere in the body.

Before we dismiss this subject let me repeat to you the symptoms that are always present in fractures of the orbit. In every case of fracture there is a hemorrhage into the orbit, which may be so copious as to cause exophthalmus. The suffusion of the eyelids, the appearance of the blood under the conjunctiva of the bulbus some time after the injury, are symptoms of great diagnostic value. The reason for this appearance is due, as we have learned earlier in the hour, to the anatomical construction of the orbit. It is similar to a cone; the walls are complete and unyielding; an exudation of blood into this cavity will naturally force the eye forward and the blood may gradually be forced between the various structures. In fracture of the inner wall our diagnosis is sometimes very simple if we remember the relation of the inner wall to the nasal cavities. The escape of blood from the nose, and the entrance of air into the cellular tissue

of the orbit from the nose, are valuable symptoms. It is important that you remember the relation of the cranial cavity to the orbit and the extreme thinness of the roof. It is not infrequent to see an apparently slight perforation wound, in the course of a few days, cause convulsions and death. A post-mortem examination will show that the foreign body had perforated the roof of the orbit and injured the brain. These cases, if you are not on the alert and remember your anatomy, will mislead you on account of their apparent simplicity. In fracture of the roof fatal hemorrhage may occur from the wounding of the anterior cerebellar, or even the carotid artery. The prognosis in these injuries are bad, being fatal in about 70 per cent. Where recovery does take place complete blindness often occurs, not due to direct injury to the optic nerve, but by the throwing out of the reparation material by the bones, which may cause loss of vision by pressure on the nerve. Berlin states that he found the optic canal involved fifty-three times in eighty-three cases of fracture of the base of the skull. Paralysis of the third, fourth, and sixth nerves may also occur in the same manner.

In conclusion, we may say that the force required to fracture the roof is very much less than in any of the other walls of the orbit. One cannot well judge the location of a fracture by the position of the wound in the soft parts, since they change their position so easily relatively. The subjective symptoms may be of little value; patients may live for weeks and show but few or no signs of the nature of the injury, at least not sufficient to indicate the gravity of the trouble, when the patient, without any further warning, suddenly dies.

That the subject of fracture of the orbit becomes an interesting one is apparent, and when we turn to the statistics of the subject and study its frequency we will come to the conclusion that every physician should become thoroughly conversant with all the facts pertaining to this subject.

ARIZONA has adopted a medical examining board.

TUBERCULOSIS.

BY H. H. SPIERS, M.D.,
RAVENNA, O.

"And he sat in the tent-door in the heat of the day.—*Genesis*, 18, 1.

The text needs little elucidation. The one spoken of is no less a personage than the patriarch Abraham. Of all worthy historic characters none stand more prominent.

Born in Ur of the Chaldees, about thirty-nine hundred years ago, Abraham, under a providence not his own, became wealthy and the head of a numerous household.

We read: "The Lord had blessed Abraham in all things."

It is not the purpose of the writer to dwell in detail, but his was a noble character, not perfect, but worthy of emulation.

Two things are obvious: Abraham dwelt in a tent and he rested at mid-day.

The climate of Chaldea is such that life in the open air was common. Plainly yet warmly clad, they dwelt as did their fathers, in tents and booths. Life to them was sweet in simple joys which knew no after-pain.

Happy we, if in our race for greater joy had recognized the pain thereafter!

Man seeks greater, closer habitations; he builds a house. In building, had he kept the ventilation as in the tent or booth all would be well. He builds regardless of an inner air, and garners as he sows—a spurious joy in dread disease—tuberculosis. In this we recognize a Father's care is greater than man's protection. This, we think, is wisdom.

Abraham rested at mid-day. Some think he idly sat while others worked. The writer does not think so. He had been working, but at mid-day, while the heat was great, sat resting in the tent. A lazy man can never rest. Some may suppose he sat and slept; the record does not say so. "And he lift up his eyes and looked and lo," etc., showing plainly he was wide awake—alive to duty.

Multitudes are sitting, idly dream-

ing of the castles in the air, while the few are slowly moving upward, step by step, the golden stair. Of this few was plain old Abraham.

Let us pursue the picture:

"And lo, three men stood by him, and when he saw them he ran to meet them," etc.

May we not learn a lesson? Abraham sat and looked and saw and acted. Let us imitate his example.

Perhaps to-day no one thing is receiving greater attention from the medical profession than the germ theory of disease. Hundreds of Abrahams are sitting in their tents. Some, I verily believe, are resting. Many, wide awake, are looking with powerful microscopes and troubled gaze. Is the theory true or false?

What is seen? In diseased conditions certain germs or microbes at the seat of lesion. At times, one kind alone; at others, more than one.

What is seen? Myriads of bacteria, or growing plants, subsisting on diseased or worn-out tissue in frail, unhealthy patients.

What is seen? A growing vegetation in a fertile soil. This is seen on every hand. Along the shores of lakes are seen the shoals of many fishes. At times, one kind alone; at others, more than one.

What is seen? Myriads of the finny tribe subsisting on the food there placed or propagating species of their kind in favored places. This is seen. Abraham could have seen the same and that without a microscope.

As the fish along the shore take up the food and propagate their kind, so bacteria in unhealthy tissue.

Do bacteria cause disease? Another class are looking, with microscope as fair and eyes as bright. They say, in words our own, no microbe *per se* can cause disease unless said microbe be diseased itself. Wondrous knowledge! My friend, good bye. How can we yet determine the sickness or the health of any microbe?

Let us pass on. In passing would it not be wiser to assert that microbes are found in the environment most favorable to growth? The seed is scattered every-

where. It falls in fertile places and takes root. Growing germs are found where there is proper food; where proper food, they propagate their kind.

Do they cause disease? Look again. "Bacteria in their growth develop toxins." If by toxine is meant vegetable poison or alkaloid; if by develop is meant store up in their substance, this statement is true.

"These toxins are given off by the growing vegetable organism." Abraham, where art thou? This, the writer thinks, is far from truth. He finds no such fact recorded in nature. Living plants do not give off their alkaloids while growing. They give them up only by infusion or extraction. Illustration: Strychnia, morphia, atropia are vegetable alkaloids. Do the plants give off these poisons in growing? How utterly absurd! This the writer endeavored to make plain some two years ago, *vide* "Status of the Bacillus," LANCET-CLINIC.

In order to be clearly understood, let us make a simple experiment. Put fifty pounds of rich earth in a box. Plant poppy-seed in this earth. Place under the most favorable conditions of growth—light, heat, moisture, etc. The seeds germinate, the plants soon grow and develop to maturity. How do we obtain morphia? Is there a physician in the land unable to answer? Listen to the bacteriologist: "Plants in growing develop toxins. These toxins are given off in growth."

How do bacteriologists obtain morphia? By collection from air, earth or water? If not, why not? Do not plants in growing give off toxins?

The following bacteriological experiment is very common: Into a flask containing a small amount of bouillon put a number of living tubercle bacilli. Let them multiply for several weeks. Filter out all the bacilli and inject a little of the filtrate beneath the skin of a guinea-pig. See how quickly it succumbs. This, they say, is proof positive the plants gave out toxins to the fluid in growing. The writer thinks, not so. A plant in growing absorbs or inhibits the soil in which it grows. If the poppies in growing take up one ounce

of soil there is just forty-nine pounds and fifteen ounces left. If in growing they develop one ounce of opium, this one ounce is found in the plants. No where else. As the plant in the earth, so the plant in the bouillon.

Have we made this plain? If so, let us take another step.

One suffers from tuberculosis. Tubercle bacilli are growing in his system. How are the symptoms of the disease commonly explained? Toxines are developed by the growing organism or bacilli. These toxins are thrown off by the bacilli in growing and continually poison the patient. Reason says the proper way to treat the disease is to give a remedy that will neutralize the toxine as thrown off by the vegetable organism.

The writer smiles when he thinks of such foolishness. He at the same time feels vexed that men high in authority should make statements so erroneous.

What is tuberculosis? A constitutional disease dependent largely on the evils of civilization, and governed by the following law: The death-rate from tuberculosis is in direct ratio to suspension of atmospheric influence.

In other words, tuberculosis exists before the entrance of the growing bacillus; one has symptoms of the disease before there is evidence of the growing germ.

A NEW YORK druggist has been fined \$150 for practicing medicine without a license. This is the heaviest fine yet imposed for such an offense. The Medical Society of the County of New York was the complainant.

IN infants, according to Eustace Smith, pain in the head is indicated by wrinkling of the brow; pain in the chest, by sharpness of the nostrils; abdominal pain, by a drawing of the upper lip.—*Med. Age.*

SIR T. SMITH, of London, recently made the statement that little more was known of the nature of mammary cancer than was brought out in the discussion held by the Pathological Society in 1874.

Society Reports.

OBSTETRICAL SOCIETY OF CINCINNATI.

OFFICIAL REPORT.

Meeting of November 18, 1897.

The President, C. L. BONIFIELD, M.D.,
in the Chair.

E. S. McKEE, M.D., Secretary.

DR. J. M. WITHROW read a paper
entitled

*Some Pelvic Abnormalities.*¹

DISCUSSION.

DR. STARK: I would like to ask whether the patient was pregnant at the time Dr. Withrow saw her.

DR. WITHROW: No.

DR. STARK: Then what would you ascribe the increased size of the left uterus to? Do you think the Fallopian tube was continuous with the uterus? One side, I believe, was four inches in length; it would seem the upper portion of the duct of Müller had not been separated from the lower portion, and it would appear that the Fallopian tube had become continuous with the lower portion and contributed to increasing the size of the uterus on that side. The other side was possibly normal, or only a little increased in size.

DR. WITHROW: My impression was that she had been pregnant on one side and had miscarried and this was in the process of subinvolution.

DR. THAD. A. REAMY: Munde has reported a few of these cases, and I think I saw with one of the gentlemen present a case of double uterus where the suspicion of ectopic gestation existed. In some of Munde's cases the septum extended to the fundus of the uterus, and also to the vaginal entritis. I saw one of these cases myself in this city. I have referred another time to a case in which there was no vagina, only an aplogy of a vagina. The patient was a married woman in this house two or

three years ago. In that case there was not even a vestibule nor anything except little ridges extending from the peritoneum up. The woman was brought to me for the purpose of operating for an ovarian tumor. Soon after she was here I discovered that she was pregnant. Upon examining with great care I found an opening near the urinary meatus, which would only admit the point of Sims' probe, and with some difficulty I probed up and made sure that it was the entrance to a uterus, but did not carry it far enough to endanger the pregnancy. I announced to the husband that she was pregnant, but he thought it was impossible, although they had been married nine years. I asked if intercourse had occurred and he said "No." I then explained to him that she was pregnant and how it might occur. Under an anesthetic I carried a director in and tore and cut some fibres and secured a very satisfactory vagina, which revealed the os in its normal condition, and when I touched it, it manifested the conformation and softness characteristic of a pregnancy at five and a half months. The patient went home and was delivered of a perfectly healthy child, without any serious difficulty, at term. The interesting features in that case are that it was congenital and not the result of inflammatory adhesions and occlusion of the vagina. The vagina went up to within one-eighth of an inch of the uterus, and there was a little pocket. The vagina was not larger than the urethra in any of its course. Nevertheless, pregnancy occurred, showing, as has been shown so often, that pregnancy may occur under extreme difficulties.

DR. WM. GILLESPIE: I had a case in November, I think it was, 1891, of retained menstrual fluid from imperforate hymen, that is called up by the cases reported this evening. The patient was a young woman, nineteen or twenty years of age, who was married in the February preceding. Her mother had called on me a few weeks before her marriage, stating her daughter had never menstruated and asking if that would be a bar to matrimony. I asked if she was thoroughly developed, and the mother said she was as well developed

¹ Published in the LANCET-CLINIC for December 25, 1897.

as any of her other girls, all of whom seemed perfectly healthy. I said I thought it would be no bar to matrimony. Some time afterward I heard from the case, that intercourse had been unsatisfactory, that it was impossible for the husband to effect an entrance, and that she was beginning to suffer. Previous to marriage she had no tendency to menstruation, but after marriage the attempts at intercourse seemed to have excited the genital apparatus, and when I examined her I found the uterus about level with the umbilicus. Protruding from the vagina was a mass about the size of the larger end of a turkey-egg, and pressure on this mass would shove the diaphragm back to the extent of an inch and a half. It did not seem to be a real hymen, but the centre of it seemed to be connective tissue. I suppose there had been inflammation there when she was a child. The patient was put under an anesthetic and the scar tissue cut away and several pints of a liquid about the consistency of tar and the color of chocolate came away. Then the vaginal vault seemed to be about the size of a woman after full term. One of the interesting features was the presence of numerous little puckered scars around the hymen, where attempts at intercourse had torn the edges but not the centre of the diaphragm. Without my knowledge she got out of bed in a few days and came some distance to my office, and asked if she could ride some miles home. I let her go home, and about eleven months afterward she was delivered of a healthy child.

DR. J. AMBROSE JOHNSTON: I would like to say a word in regard to the case in which the ureter was injured. I believe in cases of this kind, where there is no indication whatever of a vagina, and where you have no indications of retained menstrual fluid, it would be well not to interfere with the patient at all, for what good would an artificial vagina do if there is no menstrual secretion thrown out from the uterus? If the uterus were normal and secreting, it would increase in size to a degree that a bimanual examination would eventually reveal the enlargement. Then if

a great part of this vagina is occluded it would be better to remove the uterus and adnexa.

DR. WITHROW: In reference to the criticism of Dr. Johnston: Holding the post-mortem on my experience in that case, I certainly should not operate upon that case again. But if you will recall the clinical history as given, this patient was having distinct evidences of distress monthly, indicating that there was an active apparatus somewhere about the genital organism. You will also remember that examination per rectum disclosed a body larger than an ordinary uterus. It was the fact the patient was having these attacks of heightened blood-pressure and the fact the mother was afraid she would go crazy, combined with the mental hebetude, that led to this very unfortunate investigation. It seems to me, with the light of this case before me, I would endeavor to be very much surer that the body felt was the uterus.

DR. REAMY: Would you make an abdominal section in such a case in the future?

DR. WITHROW: With the light of six years' experience in that direction, if there were the marked evidences of disturbance present in that case I would now make an abdominal section, but that was six years ago, and the operation then and now would be very different.

In the double vagina case I was, of course, very much surprised to find two vaginæ present, and that the doctor had tamponed the wrong vagina. The question came into my mind as to whether or not it was wise to cut away this vaginal septum. I, however, did it with the feeling that if she did become pregnant the more roomy vagina made by cutting this septum away would make labor easier; and, further, that the hemorrhage ensuing upon its division at the time of labor would be greater than at the time I examined her. But I must confess I was at a loss to know definitely what was best to do.

Multilobular Fibroid-Tumor.

DR. RUFUS B. HALL: This specimen is a multilobular fibroid, which I present this evening because it has some inter-

esting clinical history connected with it. This was removed from an unmarried woman, aged forty, who had always enjoyed good health previous to about a year ago, when she discovered she had a tumor in her pelvis, and that worried her very much from the fact that a younger sister, a member of the family, had been through the same operation a short time before. She was referred to me from Chillicothe, Ohio. The patient complained of pressure-symptoms. On examination it was very easy to determine why she had these symptoms. She was a small woman, and the cervix could barely be felt, and well above the pubic arch we could feel the nodular tumor, which at first I suspected was the body of the uterus, and a portion the size of a small cocoanut fit into the pelvis like a child's head about the second stage of labor. With a little investigation I could outline the uterus not at all enlarged, barely a quarter of an inch longer than normal. I could easily arrive at the conclusion then that the mass felt in front was probably another tumor, probably a subperitoneal fibroid. An interesting feature in the clinical history was that this tumor fit so close in the pelvis I felt it was in the folds of the broad ligament, and the operation would be a very difficult one. The operation, when it was made about two weeks ago, proved to be the easiest operation for hysterectomy it has ever been my pleasure to make. You will observe the ovaries are attached to the specimen. When the abdomen was opened, the tumor was easily rolled out of the pelvis. Before the operation, I put the patient in the knee-elbow position, and with my fingers in the vagina it was impossible to move this mass, and that was what I based my conclusions upon that it was probably in the folds of the broad ligament. The patient could only get a movement of the bowels when the stools were fluid. The temperature at the highest point was only 99.6° the third day after the operation. The operation was a supra-vaginal amputation, leaving a portion of the cervix.

DR. WITHROW: How do you account, Doctor, for the fact that it was difficult

or impossible to lift the tumor out of the pelvis previous to the anesthesia, and yet so easy after the patient was anesthetized?

DR. HALL: After the intra-abdominal pressure was relieved by the incision the mass could be readily pushed out, yet not easily so, but it seemed to be moulded to the contour of the pelvis so accurately that otherwise it could not be moved, is the only explanation I could give for it.

DISCUSSION.

DR. REAMY: This is a beautiful case, and the operation has been admirably done. Examining it now, enormous as the dimensions seem to be, it is easy to understand how it could be done, and I have no doubt that in five or six years from now the doctor would enucleate these tumors and then cover the portions with the peritoneum of the uterus of which it had been deprived. Although the specimen is very large, it would have been a case for a brilliant myomectomy, yet I have not a doubt I would not have attempted it. If the doctor could have gotten it out, there is plenty of peritoneum here that is quite healthy with which to cover the parts. I have no criticism as to the operation, for I do not believe I would have done a myomectomy in this instance myself.

DR. C. D. PALMER: When one studies the specimen presented, it seems to me a forlorn case for myomectomy. Such a procedure would have required a prolonged operation, and would have greatly endangered the result. Myomectomy might have been done on the larger or less sessile fibroid, but it is very doubtful whether it could have been done on both.

DR. STARK: I desire to express my disapproval of the operation of myomectomy. The modification of the Baer operation in supra-pubic hysterectomy is really a very simple operation, and one which yields ideal results in the hands of experienced operators. When we split open these fibroid uteri, we find the uterine wall studded with small myomata, and what reason have we to believe that in time they will not develop into larger tumors? Our atten-

tion is only directed to the larger tumors in the operation of myomectomy, and we expose the patient to the dangers of an abdominal section, and probably to as much or greater danger as would be entailed by the supra-pubic hysterectomy, and why not do that operation at once? Since the first of January I think I have made fourteen or fifteen supravaginal hysterectomies for fibroids, and all the patients have made prompt and perfect recoveries.

DR. EDWIN RICKETTS: I want to say, in regard to the modification of the Baer operation, that possibly the doctor will hear from his cases a few years or months later. The process of buried sutures, that necessarily must come in during a Baer operation, leaves a nidus, and in many of these cases, as the result of that, you have a good many visits from your patients saying they have pain in the pelvis, and after you have fished out a number of these ligatures you will not think so much of the operation. I do not think we can draw the line and say we will do a myomectomy or a supra-pubic operation as done here by Dr. Hall. I think there are cases that are to be decided after the abdomen is opened. A case in which a myomectomy was done in a woman fifty-five years of age, the tumor weighed some ten or twelve pounds, and we had to go some distance in the uterine wall to take out the root. That woman did well, and she has her pelvic diaphragm and also the right ovary, as the tumor was removed from the left side. As to a myomectomy in this particular case, I am of the opinion that Dr. Hall did the right operation here, and I do not believe the time will ever come when, in such a case as this, we would do a myomectomy. In regard to the shock following myomectomy, it is not bad surgery to leave the uterus even under those circumstances. In the case I have referred to there is not the slightest evidence of a return of the tumor.

DR. REAMY: I would like to correct a possible wrong impression which Dr. Ricketts received from what I said. He has made some points I would like on some other occasion to discuss, but we are not discussing the methods now.

Any operation, whether you call it Baer's or Baer's modification of some other operation, or some other modification of Baer's operation, does not necessarily leave buried sutures. All the sutures left in the peritoneal cavity may be left, if the silk is sterile, just as safely as if they were cat-gut. The peritoneal cavity can thoroughly dispose of a sterile silk suture. The sutures that must be buried can be of sterilized cat-gut. If the sutures are sterile and of cat-gut, the vessels can be tied as well as with any other ligature. So that no man can be barred from the use of cat-gut any more than one can doubt he could live in a field the soil of which was made of garbage and be perfectly secure from danger in these modern times of sanitation. But I did not arise to speak of that. My remarks were not intended as a criticism of Dr. Hall's operation in this particular case, but as we examine this specimen, now reduced in size probably one-third, as it is, and out of the uterus and liberated from its normal attachments and not packed down as it was, we can see very easily that a myomectomy could have been done. I have not the slightest idea nor have I the slightest doubt but that in five years Dr. Hall, Dr. Ricketts and myself will be doing myomectomy in such cases.

DR. BYRON STANTON: What advantage would there be in leaving the organ there by a simple myomectomy?

DR. REAMY: I go on the theory that it is an advantage to leave any organ that we can. The uterus would have been left in as good condition as any uterus. The technique of these operations is being so improved, and myomectomies are being done in cases in which heretofore it would have been impossible. If these tumors are subserous and you can get plenty of unwounded peritoneal tissue to cover over the uterus, it is of little consequence how large a tumor is removed by myomectomy. After you get the tumor out and examine it, in Dr. Hall's case, we know it would have been a brilliant case for myomectomy.

DR. HALL: Would you please make yourself a little plainer, Doctor? Do

you use silk for the ovarian artery and then for the uterine artery?

DR. REAMY: I use silk very often all through and sometimes I use silk and cat-gut. I do not remember now that I ever had any trouble with a silk ligature with which I had tied the ovarian artery.

DR. HALL: You never will.

DR. JOHNSTON: The design of a myomectomy is to both make an easy operation and to preserve the uterus with its functions, which in this case cannot well be attained. With this specimen before us it is difficult to determine what is uterus and what is tumor. On both sides of the uterus are nodules which are so intimately associated with the Fallopian tubes that they could not be removed without injuring the Fallopian tubes to such a degree as to destroy their function.

DR. GILES S. MITCHELL: At the last meeting of the American Medical Association I had the good fortune to hear that prince of abdominal surgeons, Howard Kelly, read a paper on myomectomy. He related in his paper one or more cases where he had removed as many as fourteen growths from the uterus; indeed, to use his own language, scarcely any of the anterior uterine wall was left. It is hardly necessary for me to state that his paper was severely criticised. Myomectomy within certain limits is not only justifiable, but is to be preferred. Kelly, however, has reduced it to the absurd. Myomectomy even in suitable cases is a much more difficult and dangerous operation than hysterectomy. The latter operation ordinarily is not difficult, and the mortality is low. Granting that an operator as skillful as Kelly might be able to remove a dozen fibroids from a uterus and the patient survive, what possible service could an organ so mutilated render? During the past year I have made eight hysterectomies after the method of Baer, and have had no trouble following the employment of silk ligatures. Like Prof. Reamy, I believe silk is the safest ligature for this kind of work, and if it is not too large and is thoroughly sterilized in time it is disposed of.

DR. HALL: There are several things

to take into consideration when we think of making a myomectomy, as has been indicated by some of the speakers to-night. One important consideration is the age of the patient; next, is the number of and location of the tumors. Now, as to the age of the patient, if the woman is forty years old or older and unmarried or no prospects of an immediate marriage, it matters not a particle to her whether she has her uterus or not. If no other consideration would induce me to make the operation as made here in this case, other than the statistics of the mortality of the two operations, in a given patient before us I would make the operation done here. If the patient was a married woman or a younger woman, under thirty, and two tumors subperitoneal with no indication of other fibroid tissue in the uterus itself and she was anxious to bear children and were made aware of the increased danger in the operation of myomectomy and desired a myomectomy, then we should consider that operation. But if the woman were forty years old or older and were not particularly anxious to bear children, and the mortality is greater in myomectomy than in hysterectomy, she should be given the best chance for her life. Few women who do not bear children under forty years of age, bear children after with a healthy uterus. Then, to take a case like this, I do not believe the day will ever come that any man at the operating-table would make a myomectomy in such a case as this. I do not believe that day is here nor within five nor twenty-five years of us. In such a case as this there would be no peritoneum adherent to the uterus when you got through, and then you probably would have a few fibromata in the body of the uterus left. But that would matter little, for the patient would almost certainly die. I am not going to discuss the subject of ligatures in this case, further than to say that a recent discussion in the Southern Surgical and Gynecological Association, in St. Louis, brought out a very important point, which was overlooked by one of the speakers this evening—that is, the sterile cat-gut, that is absolutely sterile under

the culture-tube, is capable in the body of forming what they describe as a chemical sepsis. Nature is not able to care for the cat-gut in all instances, and an abscess forms about the cat-gut that is buried in which the pus has no infecting germs in it. This they call a chemical process of suppuration. After all, we cannot sterilize the cat-gut from the surgical standpoint. Dr. Kelly said in Washington that the mortality must always be very much greater in myomectomy than in hysterectomy, and I think if we emphasize that fact we are correct.

Cancer of the Breast.

Dr. W. L. Rodma states that the results of Keen, Bull, Dennis, Wier, Halsted and Powers, six American surgeons, who have within the year published their statistics in operations for cancer of the breast, show a mortality of less than one per cent. (six hundred and fifty-six operations and six deaths). He concludes his paper with the following propositions:

1. All mammary growths should be removed at once, for innocent tumors, carried for a long time, become a menace.
2. The complete operation should always be done in cases of malignant disease.
3. In nearly every case it is simply impossible to detect enlarged glands until the axilla is opened. Keen says that he cannot do so once in ten times.
4. The mortality should be, with average operations, about 3 per cent.
5. Radical operation should promise from 25 to 50 per cent. of permanent cures, according to the time when patients apply.
6. When in doubt operate; never wait for symptoms.—*Charlotte Med. Journal.*

FOR contusions, wash the injured part, and then paint twice daily with menthol in collodion (1—8 or 1—4). Pain will be relieved, and the resulting constriction of the vessels diminishes the discoloration and swelling. This treatment should not be used in case of contusion of a joint.—*N. Y. Med. Times.*

Translations.

NOTES ON THE HISTORY OF MEDICINE.

TRANSLATED FROM DE BORDEU.

BY THOMAS C. MINOR, M.D.,
CINCINNATI.

THEOLOGICAL PHYSICIANS.

III.

Science of Solomon and of Moses—A King of Israel Surprised When a Patient Was Sent to Him—Elisha Cured a Patient Attacked by Leprosy—Miracles of Elijah and Elisha—Medicine Among the Jews—Jesus Christ Healed the Sick.

Solomon stands out in striking relief in medicine, or at least in physic, his great wisdom giving him much importance; he studied plants from the cedar of Lebanon up to hyssop, as the Bible remarks. The alchemists have claimed Solomon as one of their sect, by reason of the great quantity of gold which he furnished his country. Solomon was the original gold man; much has been written of his folly in this regard.

The alchemists have claimed a like honor for Moses, another gold man, who dissolved the golden calf in water, a miracle; he claimed sulphur dissolved gold, and Stahl claims the same. It was also claimed that Solomon placed in his gorgeous temple a book containing his discoveries and the drugs doctors should use. This was in the days before sero-therapy. It was in this book, perhaps, that Joseph claimed that the grandsons of Beth laid down their medical knowledge, in order to chronicle what they knew about the flood; it seems they held some prophecy from Adam. Moderns may claim these are most miserable traditions.

One author has attributed singular knowledge of medicine and chemistry to Noah. He claims that old Dr. Noah knew how to prepare elixirs with which to nourish the animals in the ark (modern beef extracts, etc., perhaps!) This same author claims Noah lighted up

the ark with phosphorus (an improvement on modern electric lights).

A king—of Israel, too—was much surprised that some one in Samaria sent him a leper to be cured. "Do you take me for a God!" cried the Jew—a king of Israel, too. "Of what use can I be to this patient?"

Delaurens, first physician to Henry IV, claimed, according to popular opinion, that dates back to Clovis and Saint Louis, that all the kings of France could cure scrofula. The English have the same tradition that English kings could cure the same disease by touch. Modern rulers, like the emperors of France and Germany, cannot cure their own scrofula. America, happily, has no such tradition—need we say superstition—although they once hanged and burned witches in highly cultivated New England. But, after all, their claims of faith cure merely prove the faith of subjects in their monarchs.

The Israelites have been by many regarded as holding the wisdom of King Solomon, but at the present day there are no very manifest indications that they possess Solomon's crown, at least as regards medicine, for we cannot forget that the Egyptian kings claim to have dissected dead bodies.

The kings of Israel have perhaps changed; those of Samaria sent their patients to Elisha, whose reputation as a leper-curer seems to have been widespread. It is to this prophet especially that a very kind Providence conferred the very high honor of leper specialist; however, that was in the days of miracles. This disease has resisted all modern remedies. There is no modern Elisha. It was then not regarded an inflammatory disease; the doctrine of inflammation was reserved for more recent centuries, when we have but very few lepers to treat. Skin affections, venereal diseases, cancerous maladies and scrofula seem to have usurped the place of the old-fashioned Biblical leprosy. Leprosy is about as curable at the present time as in the days of Solomon. Yet we speak of the progress of the healing art!

The ancients deemed leprosy as an inflammation of the blood. We believe,

even with Aretius, to whom this idea is attributed, that he never thought so; in fact, Aretius deemed that leprosy came from extraordinary cold; besides, the idea of inflammation is not mentioned in his long description of leprosy, where you will find, if you look very carefully, that Moses expressed himself more clearly on the subject of this frightful disease.

The prophets of old gave, on several occasions, proof of miraculous knowledge of medicine that they possessed. They united sacerdotal grace with medical science; they even, sometimes, appeared to cover up these miracles by the use of very natural methods.

This reserve, that was eminently proper to prepare mankind to the sublime truths of religion, was in the regular order of Providence, to arise by degrees to the grandeur of evangelists. Let us cite a few striking examples of medicine, sanctified by its union with theology.

Isaiah, who was before Hezekiah one of the greatest miracle-workers, made the shadow on a dial go backwards; he cured the ulcer on a king's leg, and used in making this cure only a big poultice, the particular effect of which was, no doubt, due to the prophet. He brought a dead child back to life by blowing in its nostrils. Modern sero-therapy never achieved such a triumph. He excited by his own animal heat a child already dead, one who could not profit by natural medical art.

This same Elisha could cure gout by colocynth mixed in a saucepan with flour, which (this was no miracle) cured the patient.

Tobias, the son, acting on the advice of the angel Raphael, restored his father to sight (what modern oculist could do this?) by rubbing the old man's eyes with the gall-bladder of fishes; this kind of blindness, however, can only be cured by angel oculists.

Thus medicine and its applications marched hand in hand with the grace and virtue of miracles, in order to prove, doubtless, the essential difference found between natural agents, whose activity is very limited, and the virtue of

miracles, which, if we may thus express ourselves, *commence when medicine is finished.*

It is from this, so to say, mixed manner that medicine was practiced by the chosen people of God. It passed on, little by little, corrupted from day to day by the Essenians, a sect of Jews opposed to the Pharisees and the Sadducees. These three sects, in which we find close connections with the Epicureans, the Stoics and the Cynics, perpetuated and extended themselves so that the Essenians cultivated medicine more than all others. They bore a name drawn from the art; they were called *healers, or curers, or treaters.*

The Savior of mankind performed miracles that cannot be confounded with natural phenomena, since they were entirely above and beyond such phenomena; he placed in full evidence ordinary and human medicine; he put it, if we may thus speak, in a parallel with divine medicine or with the all-powerful by which he commanded nature. This was a triumphant means to remove all pretext of doubt as to the truth of his mission, and as to the divinity of his works, that the pride of human science cannot move; he chose that that appears in some way the object of medicine, rather than other things among men.

He could, when he desired, make wonders of another kind; *he cured principally*, and consecrated himself to medicine above all other professions. He touched the sick and they were healed—healed by the simple placing of the hands upon them; he made a clay poultice with his spit, and placing it upon a blind man's eyes cured him. What modern oculist could do this? He also cured another patient with saliva. Who could do this without supernatural power? Human skill might blunder all day and not accomplish this!

All this appears singular to modern medical science. Yet what can be more important in this life than the cure of souls for the life that is to come hereafter? The present is only a mirage more frail than that which has passed. It is difficult to see how divine medicine and human medicine have not always

been intimately connected. The rules of the latter cannot have a true foundation if not regulated and enlightened by the rules of the first named.

IV.

Precepts of Medicine Conformed to Rules of Religion—The Apostles and their Disciples Cured—The Love of the First Christians for Medicine a Subject of Discussion—Doctors as Judges of Miracles—Medical Priests and Ecclesiastics.

Religion contains all the art of healing; religion is the only true medicine, a daily aid to health. Hoaquet and several others have advanced the idea that the passions of mankind must be submitted to the rights of religion; all the advantages of diet prescribed by the Bible. Fasting is prescribed, gluttony proscribed.

The church, when it laid down certain rules of diet, argued on the side of reason. The spirit of penitence is the best of all hygienes.

Thus, again, we see the connection of medicine with religion. The entrance of the sanctuary places the doctor by the side of the priest.

The apostles, their disciples and the faithful of the early ages of Christianity went from city to town, curing the sick and preaching the word of God, following the order of Jesus Christ.

Physicians of all sects will find with pleasure the traces of doctrines and medical opinions in the early apostles and the most celebrated fathers of the most holy Mother Church. Then the gift of medicine was joined to that of prediction and that of miracles, and aided in the establishment of the church. Several of the saints cultivated and practiced medicine.

Miracles were a necessity when the foundations of churches became loose. The faithful only kept on confessing their faith the more they were persecuted. All religions, when suffering for their faith, seem to abandon the body; their religious exaltation gives them contempt for mere medical treatment. Their zeal turns them to things most purely divine; they place medicine

in the class of human and perishable things, that merits but little attention; they no longer make extraordinary cures by the grace of miracles.

How could it have been possible that the science for conservation of health should appear of any importance to the earlier Christians, who were devoted to all manner of austerities, and who only desired to live for the time it was necessary to undergo martyrdom?

It was necessary for these earliest Christians to prepare for the sacrifice of their lives by maceration, a diet that would not attach them to this earth; to be penitent, all-suffering, even to the point of death.

This was an epoch, too, where the first cause of disputes were between ministers of religion and ministers of health; the latter were Pagans and Jews for the most part. They were the declared enemies of the church and its followers.

No wonder the earlier Christians imbibed an additional honor for such an artistic class of slayers, and regarded their medical doctrines as a wicked art, invented to imitate miracle gifts on the subject of health, a gift that the church abolished.

Yet physicians, on their part, spared no efforts, and ended in leaving a suspicion that there was no religion in any of the medical schools.

All these gave rise to a prejudice that was perpetuated over long—very long—periods of time. This prejudice, too, did not fail to become a too favored source of dissensions, and, on oft-repeated occasion, for scandal. The neglect to avoid disputes between theology and medicine—the two only great bodies that have ever striven to extend truth and happiness among the masses of the people and destroy evil tendencies.

In time the doctors drew the masses to a certain extent back to them by the cures among those who had not the courage to resort to them; they cared for the pains of the body, but then went, unfortunately, again, just as at the present epoch, to draw the eyes of the world on corporal and natural causes; they followed the tendencies of

the passions, or at least those of love of life; the number of their partisans increased from day to day; the zeal of the clergy revolted, they saw a later set of Christians occupied entirely by things terrestrial.

Who should better feel the truth of sacred dogmas than physicians? What hands are better to sow the seeds of good doctrines and nourish the sweetest fruit, if it is not in those who have, as men, always been accustomed to distinguish between truth and falsehood, and consider the grandest works of the Great Creator of all the universe? Who should always, as much as the doctor, have been able to appreciate the grandeur of miracles and the method by which every outgrowth of religion has spread itself? No one knows better than a true physician the limits of reason and those of natural causes.

The entire world daily consults the doctor on the subject of miracles, and it is wrong to claim that we, as a body, do not regard them as above the natural faculties, and requiring rigid examination before they were adopted by the church; here we find again that medicine is indissolubly joined to religion. This union has always existed, despite whatever may have been remarked; the Christians were more or less favorably disposed to medicine, just as they were more or less of a mind to confide their health to infidels, such as Jews or apostate Gentiles.

There have been times when the church—and it has often been in the right, it must be admitted by every impartial historian—has ordered, through its councils, to have the orders of medical priests for the truly Christian subjects.

Among the physicians to kings we count a Gilles de Corbiel, to Phillip Augustus and Canon of Paris; a Roger de Promis, Canon of Saint Quentin, physician to Saint Louis; a Jean Tabain, Bishop of Terouane, physician to Charles VI; a Guillaume d'Aurillac, Bishop of Paris, and physician to Philip the Beautiful. In this modern century we see that the church has again started medico-theological colleges in France and Belgium to offset the efforts of a so-called

class of medical scientists who claim supernatural powers and delude the masses of fools among people with new nostrums, whose claims are not based on science revealed nor true reason. At no time in the past has medicine descended so low, to the level of a trade, as at present. The majority of doctors are mere prescribers of medicine of a proprietary order reduced by that greatest of corrupters of public morals, a debased and venial press, whose so-called advertising columns are filled with the basest and lowest of lies at so much a line. Even in Protestant countries the Christian churches of different sects are educating their missionaries as physicians.

The true physician, even when not a member of any sect, should not be among the vulgar crowd that clamors against churches or religion. Unfortunately, those who know little of medical history are greater by far in number than those who esteem the real relation that theology and medicine bear to the public. It is ever the poorest doctor who proclaims, as a rule, who is most successful from a worldly standpoint. The charlatan and "those who slay from chariots" have ever stood on the same level. Priests of the church especially are accustomed to following up the sick of the church; they see them as often, and, sad to relate, with clearer eyes and heads than many a doctor. The importance of the sacraments is ever in their mind, and to them the moment of death is closely watched. The priest can always tell more clearly than the doctor the hour of death. He is there to comfort the last moments of the ever-faithful. The priest, too, is the best judge of the physician. There are but very few priests, too, in remote rural parishes of France who cannot act wisely in all emergency cases. There is no good reason, then, that clergymen of all sects should not practice. There is vastly less humbug in religion than in medicine. Yet the priest is ever charitable. No one ever heard a priest calumniate a doctor, no matter what the latter's religion might be.

The final union of religion and medicine will come sooner or later; the

growth of modern materialism will produce the desired result. The ministrations of a medical clergyman would give a true dignity to medical art. When the churches organize their own orders, that will neither charge fees nor refuse service, be they poor or rich, *the trade instinct in medicine* will be driven out. The only danger line is that materialism may organize a number of orders to preach its vicious doctrines while rendering gratuitous service. The materialistic doctors, of all sects, will be found enrolled under their banner. A climax is surely approaching the world again in the breaking off the good fellowship that should ever exist between the clergy and the doctors. But of this some author, two hundred years hence, may write, with the old stilted exclamation, "History repeats itself."

[THE END.]

Dressing Suppurating Wounds with Sodium Bicarbonate.


M. N. Guorguievsky recommends the employment of moist sodium bicarbonate dressings for abscess, phlegmon and paronychia. To obtain the best results a compress saturated with a 2 per cent. solution of sodium bicarbonate should be applied directly to the diseased tissue, after incision and gentle expression of the pus. In two cases of phlegmon and serious paronychia with extensive suppuration where the ordinary antiseptic dressings were used a long time without effect, sodium bicarbonate arrested the process very rapidly, all traces of pus having disappeared within a few hours, and there was no necessity for the introduction of gauze tents into the open wound. Absence of odor, positive and rapid action, and cheapness of this new dressing are advantages so evident that it is not necessary to dwell on them.—*Indian Lancet*.

DR. STOCKER, of Glasgow, believes that the most distressing movement of a ship, the pitch—which is the chief cause of seasickness—can be antagonized by means of a full respiration taken deliberately with each descent of the ship.—*Med. Age*.

THE

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Editorial.**GOLD-CURE ASYLUMS.**

Recently a widely-advertised gold-cure home was called on to explain the unusual mortality of its cases, and the result was somewhat startling. In four months eight cases became insane and six died in this condition. Two died in the asylum during this time. Complaint was made and an examination showed that alcohol and opium were given to all cases, concealed in bitter and other drugs. Where the delirium increased and could not be controlled by opium these cases were sent to the insane asylum. The physician in charge had been a street lecturer on "tape worm cures," and his medical knowledge and character were entirely unknown. He disappeared, and the home dissolved with a large list of creditors. Another cure was abandoned suddenly when its superintendent was arrested for forgery. He proved to have a portrait and character in the rogue's gallery of New York, and was well known as a hotel and bank swindler. A third man, who has been prominent as a lecturer and

writer for the press, condemning medical men and skeptics generally who doubted the gold cure claims, made the fatal mistake of turning the light on his own private history. As a result he disappeared in a night. Two courses of training in State's prison were not enough; the State was anxious to have him take a third course.

These facts are not encouraging for the manager of gold cures, but at least they call attention to the facility for swindling and imposing on the credulous public, and the distressed victims and friends of inebriates. In some of the States laws are in force requiring license, and some supervision over all homes where lunatics and feeble-minded persons are gathered for treatment. In all communities it should come under the local health boards to determine whether a man or men could open a home or asylum and receive inebriates and feeble-minded persons unless he possessed some qualifications, and had proper surroundings and appliances. Within the last five years hundreds of such homes have been opened by disreputable incompetents, and after a brief period have closed, leaving both the victims and their friends who trusted them sadder, weaker, and possibly wiser. In one instance a physician, who had an inebriate son, invested all his property in a building for a gold-cure company. Two years after the company failed and the property was taken for debt. The physician lost all he had, and his son is in a State insane asylum.

Asylums and homes for inebriates, the same as insane asylums, should come under State supervision, and be obliged to conform to some rule, and have some degree of responsibility to the public. The present method of opening a home anywhere, and receiving these cases for

treatment, governed entirely by the knowledge or ignorance of the manager, is perilous to the community. Gold-cure homes which depend on advertising and pretentious claims should be regulated the same as asylums for the insane. In every community they should come under surveillance, not as to method of treatment, but as to facility and ability to properly treat such cases.

T. D. C.

DIPHTHERIA AND TUBERCULOSIS MAPS.

Through the kindness of Dr. Withrow, the Health Officer, we are in receipt of maps of Cincinnati, printed in colors, which outline the specific localities where diphtheria and tuberculosis have been most prevalent during the year that is past. These maps are deserving of a careful study, as topographical indicators of sanitary conditions which are more or less conducive to an existence of two diseases which are disseminated among the people.

Attention is at once directed to the centre of the city as being most free from both of these diseases. The worst points for diphtheria are north of Liberty Street and extending up the Millcreek Valley, adjacent to the creek; while tuberculosis is shown to be most prevalent on the level of the city south of Fifth and extending up along the river east from Central Avenue.

The bad consumptive district is the old part of the city, where inhabited buildings are mostly old and in a state of decay. That entire district should be placed under strict sanitary surveillance, and landlords encouraged to displace their old structures by an erection of new and better buildings.

The diphtheria habitat is worst along the course of Millcreek. This is as might be expected. That stream is a

reeking, filthy open sewer, carrying the sewage of more than one hundred thousand people, besides that from scores of dairies, etc. It is beyond question that this sewage contamination has been the cause of a vast amount of sickness in the region mentioned, and to which forcible attention was directed by the writer more than ten years ago. That open creek engineering problem is still an unsettled question, and, being unsettled, carries right along with it a mortality rate from preventable diseases that should attract municipal and legislative attention. Something should be done, and that speedily. The sewage from Longview, the two great infirmaries, Glendale, Wyoming, Carthage, Lockland, Reading, College Hill, Bond Hill and a dozen other places flows into the Millcreek cloaca.

The Legislature has before it a bill having for its purpose an abolishing of the death penalty for criminals. Let some action be taken that will look to an abolishing of this harsh decree as applied to scores of innocent infants and children every year. This is a great work to accomplish, but it is possible, being possible, should be enforced. The annual floods of the Ohio River have a beneficent as well as a disastrous influence; they do clear out a mass of foul, decaying albuminous matter that is poisonous in an extreme degree.

Dairy-pens, sheds and houses, and distillery hog- and cattle-pens should be banished to a territory beyond the city limits. This is sanitary work of the utmost importance. Some still-slop dairies have promised the Health Officer to move their places of business before the first of next month. This is not the first promise of these people, but all the same it is one that should be rigidly enforced. Every one of these institutions, including all distillery cattle- and hog-

pens, should follow close in the wake of the dairies. The stock yards company should have their attention directed to the necessity of their looking for a location beyond the city limits. Their places are continuous menaces to the health and lives of the people.

RIGHT OR WRONG—WHICH?

CINCINNATI, March 31, 1898.

Editor LANCET-CLINIC:

I am authorized to state, as Medical Director, that unless this racket about "Christ's Hospital" in the LANCET-CLINIC is discontinued, and that very speedily, the staff as a body, comprising some fourteen members of the profession, will withdraw their support of the journal, or in other words discontinue their subscription. It makes little difference, in so far as the profession of the city is concerned. They are, I think, about in the position of the man kicked by the mule. But the profession outside of the city have and will no doubt be influenced by the incorrect and misleading statements appearing from time to time.

Respectfully,

W. H. DEWITT.

The LANCET-CLINIC has had nothing to say whatever about the staff of Christ's Hospital. So far as known to the writer they are all reputable and honorable gentlemen. What has been said in these pages pertaining to the business management of that institution stands until disproven. Word has come from Ohio and Indiana counties confirmatory of all that has been written upon the subject. Drs. J. E. Morris and G. Pigman, of Liberty, Ind., report invasions of their practice by deaconesses and their patients solicited and taken to Christ's Hospital; Dr. Hawley, of College Corner, also complains; Dr. Lorimer, of Fair Haven, O., reports invasion; Clermont and Warren counties also invaded. These are reports within a week.

There is an abundance of evidence as to this work and its character. The

method is purely commercial, and is clearly unethical—hence immoral—as anything can be. A physician has no moral right to personally or by agent solicit the patronage of a patient under the professional care of another physician. That will not stand for one single minute. If an individual physician cannot do this, it certainly is equally wrong and illegitimate for a hospital, through its agents, to do so.

Dr. H. M. Brown reports a patient sent from Highland County to Christ's Hospital for him to attend, a certain fee for professional services being agreed upon. The patient went to the hospital and was there induced by somebody to place herself in charge of one of the staff, and to notify the first engaged physician that his services would not be required, as she would be treated by one of the staff.

Either this is right or it is wrong. If it is right then the editor of the LANCET-CLINIC is clearly wrong, and will not have another word to say, but step down and out of the discussion; if it is wrong, the threat of loss of subscribers does not worry him very much. No man loves the good-will of his professional brethren more than the writer. For what he may honestly consider their best interests he will stand erect seven days in every week. As in every other profession and business, so it is in the medical profession, there are evils; some are greater than others. Infallibility is not pretended. Where evils exist in places under control of physicians, such evils should be corrected within our own fraternity.

Is the management of Christ's Hospital willing to say that the LANCET-CLINIC has published a single false statement? If so, let them write it out and it will be published with pleasure. Will the Medical Director of Christ's

Hospital be good enough to write out some specifications asserting and showing wherein there have been published incorrect and misleading statements, as indicated by him? If Christ's Hospital is not managed as a commercial concern, and its pay patients do not go to it through the channels named, the writer desires to know it, and that right speedily. If such is not the case as stated, he has been imposed upon and conditions misrepresented to a degree that is astonishing. The medical staff is not, and never has been, charged with being a party to this sort of business, but whether it is probable that this thing could be going on month after month and they never suspect its existence is left to imaginations of readers of the LANCET-CLINIC.

As intimated by the Medical Director of Christ's Hospital, the medical profession of Cincinnati does understand the hospital situation and conditions, and has obtained that information through two pretty reliable channels: The first and most feeling one, one so touching to the sensory nerve as to be seen, is through experience; the other is merely a supplement, and that is through a reading of the LANCET-CLINIC, which mirrors the first. Who is right and who is wrong?

THE THIRTY-SECOND NATIONAL ENCAMPMENT OF THE GRAND ARMY OF THE REPUBLIC.

This notable meeting of ex-soldiers and sailors of the late war will be held in this city during the first week in September.

A Citizens' Committee have in charge the arrangements for their entertainment. This is being carried forward on a scale of magnificent elaborateness, for which citizens are called upon to

make contributions, in which it is desirable to enlist the sympathies of all of the people, so that there may be given a right royal welcome to all who come within the gates of the city during the first week in next September.

To Dr. A. B. Isham has been delegated the work of obtaining subscriptions from the medical profession of the city for the Citizens' Fund. Liberal responses have been sent in, but the doctor desires to call the attention of those who have not yet responded to his circular of the desirability of their giving early attention to the subject. The occasion will be a notable event in the life of the city, and in which the local medical profession will be handsomely represented in the work of entertaining and caring for the men who wore the blue in the strife of 1861-1865. To this end an effective organization of a working medical corps has been made.

There will be in camp at Chester Park an army of more than twenty thousand men. This number may be increased to twice that many. More than twenty thousand have already been assigned to school-houses, and more than half that number have found quarters in hotels, halls and boarding-houses. This is the situation to date. It is expected that not less than one hundred thousand veterans will attend the encampment. This is a very large army—an army of men on the shady side of life.

It is thirty-three years since peace was declared and the last gun fired—the actual life of a generation. To do them honor the entire city will put on its best bib and tucker, extending a whole-hearted greeting, with best foot foremost, to every one. The attractions of the occasion, with nominal railway rates all over the country in every direction, will bring together more than half a million visitors—a concourse larger

than at any similar gathering that ever took place.

This is of special interest to physicians. First of all, there is the professional attention needed for an army of one hundred thousand men, the most of whom are more than sixty years of age, and all have passed the half-century milestone of life. All have passed through the vicissitudes of war, which means that their constitutions have been put to severe tests, and in a vast majority of cases more or less permanent physical disabilities mark their condition. This means that they are subject to ailments which will require more or less attention at the hands of physicians, which will be cheerfully given by the local medical corps identified with the Citizens' Committee.

Another phase of the occasion will be a gathering of not less than four hundred thousand other visitors. This is a vast army, but, great as it is, the city is preparing to give them a welcome and care that will be satisfying to every one that comes, all of which means that for the time the population of the city will be doubled, perhaps much more. To meet the sanitary requirements of the event, as well as to attend to the sick and ailing, the local medical profession are fully equal to every conceivable emergency. Their work will be done in a way that will approximate the discipline of a regular army corps, and in a manner that will be neither intrusive nor obtrusive, but helpful where needed.

Don't forget the sending of your mite to Dr. A. B. Isham.

THE OHIO MEDICAL LAW.

During the past week an amendment to this law was introduced in the Legislature, which has for its purpose a weakening of the measure, and which

should be snowed under. Write to your member and utter a protest against its enactment. Eternal vigilance is the price.

The State Board has not been any more active in its prosecutions than it should be. Where? oh, where! are the Hamilton County indictments found against violators of the law? Similar somnolent conditions are reported as existing in Cleveland.

RUSH MONUMENT.

Remember the necessity of raising a large fund for this purpose. There is the hand that withholds and tends to poverty, and the one that gives and makes rich. Here is an instance wherein a small contribution from every one will aggregate a sufficiency to accomplish a grand purpose. Dr. E. W. Mitchell represents the profession in Southern Ohio. All communications should be addressed to him in Cincinnati.

EDITORIAL NOTES.

At a recent informal talk just previous to the opening of a medical society of this city the subject came up as to the free treatment of ministers and their families. Different members gave their experience, and one gave the cap-sheaf by telling the amount of unrequited time and labor which he had devoted to a well-paid pastor of a rich congregation. A younger member interposed: "I treat Rev. Blank's hired girl and she pays me every time I go." Those present arose with one voice and said: "Send her to me," demonstrating justice and desirability.

HOTEL RATES IN DENVER.—We regret that the editor of the *New York Medical Record* has had some misunderstanding with the Brown Palace Hotel

management as regards rates; and the former, through his official position, has seen fit to criticise the Denver hotel business in general, and to make statements about the hotel rates that are to be in force during the meeting of the A. M. A., which are greatly in error. If there is one thing about the Philadelphia meeting that the local committee here wish to correct in our June meeting it is the question of hotel rates, which the slang term "hold up" would well apply to as regards the way the visitors were treated in that city, and the committee here have guarded well against that disagreeable feature by making definite business arrangements with the Denver hotel men, whereby reduced rates have been made and will be kept.

—*Colorado Medical Journal.*

The Denver profession will do well to inquire into the railway influences which were said to be potent in localizing the place of meeting and report upon it also, as well as upon hotel action.

RESULT OF CO EDUCATION OF THE SEXES.—Recently a young lady said to a young gentleman with unassumed naïveté: "Have you passed the orgasm yet?" He replied, with some embarrassment: "No; I have not yet passed the organon." (Fact.)

ACADEMY OF MEDICINE.—Monday evening, April 11: "Typhoid Fever without Cold Baths," Dr. Joseph Eichberg.

PULTE MEDICAL COLLEGE, April 5, graduated a class of five.

THE sixty-sixth annual meeting of the British Medical Association will be held in Edinburgh, July 26 to 30, 1898, under the chairmanship of Sir Thos. Grainger Stewart, President-elect. It is twenty-three years since the Association has met in that city.

Correspondence.

ADVERTISING.

LOUISVILLE, KY., }
March 29, 1898. }

Editor LANCET-CLINIC:

How often it is that we see in the daily papers, and even in religious weeklies, sure cures given for the terrible disease—consumption. To these statements are appended names of individuals (fictitious generally, perhaps, but often real), not only of the common people, but very frequently the names of the clergy appear, stating in positive terms that they were cured of a severe case of consumption. These parties, whose names are *bona fide*, do not intend to mis-state or misrepresent, but the explanation is as follows. They at some time have had a severe cough from a cold, and have become convinced in their own minds, after reading the advertisements that appear in the press, especially the religious press, that their trouble is consumption. They obtain these remedies—a good cough remedy, perhaps. Their cough gets well, and they truly believe that the remedy has cured them of consumption. Feeling thus they cheerfully give their names as being miraculously snatched from the grave, or from the dread disease consumption by some save-all or cure-all. This causes others to procure the remedies, and the cases of colds which get well while they are using these remedies are by the smart advertisers heralded as wonderful and remarkable cures of consumption. Of course, the cases which are not benefited by these remedies we never hear of; they are kept in the shade. Well, it sells the medicines, fills the manufacturer's pockets, and does a great deal of harm. Such remedies do not cure or even alleviate a single case of consumption. Still, the consumptive patients, who know in their heart that there is no help for them, nothing that will save them from the grave, are anxious and hopeful nevertheless, and will procure them upon the principle of a drowning person catching at a straw;

will try them, usually to their detriment. But did not they see the advertisement in their church paper, and what better recommendation could be given to them than this?

I have often said that the human family like to be quacked, and what system of quackery is practiced more extensively than the so-called cures of consumption? We all know that so far there has been no cure for this terrible scourge yet reached, yet we will try every new thing that is advertised for it. Many a consumptive's life has no doubt been greatly shortened by following this *ignis fatuus* of so-called consumptive cures. I believe the day will be finally reached when the physician can say to consumption as Christ said to the devils, "Depart!" and it will depart. I do not know as it will go into the swine, as I believe a great deal of it originally comes from them, but it will be under the control of science, just as much so as an ague is, and can be controlled by the valuable quinine. When doctors hear me express this opinion they say I am going farther than I have any warrant for. I admit that so far I have no further warrant for it than the idea which somehow has got into my head that there is a cure for every disease. The only trouble appears to be that we have not found the cure as yet, but as we live in an age of investigation and advancement in sciences we will finally strike upon some remedy which will be a specific in consumption. A great many years ago it was considered that there was nothing which would prevent the ravages of small-pox. Jenner discovered that the teat of the cow produced something which, when introduced into the human blood, was almost a positive prevention of the disease; and why not discover something that will prevent and even cure consumption? One looks just as reasonable and probable as the other. But I think it is all wrong so far for anybody to advertise a positive falsehood, and when they say they have a cure for consumption they are doing it.

What a happy thing it will be for the human family when such a discovery

is made, for I believe at least one-half of those who die after adult life die from this disease. It is no respecter of persons. The rich die just as well as the poor. When we come to disease, anyway, money will not buy exemption from it. Money will procure us comforts and all that, but we cannot with our money say to disease, "Do not come here," and it will not come. No! about the only equality we now have between the rich and poor is that they die alike, and when dead they are equal—simply a cold lump of clay that money will not warm. And I expect the worms like the poor fully as well as they do the rich. Death levels all.

Consumption, I am silly enough to believe, is a disease which we inherit from our progenitors, or at any rate the tendency to it. We admit that exposure may expedite the development. Therefore, how necessary it is where we know our parents or grandparents had consumption that we should take good care of ourselves and avoid all unnecessary exposure. We should guard against it with all the means in our power, and thus try and avoid it or extend our existence as long as possible. In doing this we must not let the thought of it depress our nervous systems. We should simply act with prudence and judgment. Avoid worry, and avoid as nearly as we can anything which will lower in any way our vitality.

GEO. J. MONROE, M.D.

442 W. Walnut St.

Telephone Charges in the District of Columbia.

The telephone bill has passed both branches of Congress. It provides "that from and after the passage of this act it shall be unlawful for any person or any telephone company doing business in the District of Columbia to charge or receive more than \$50 per annum for the use of a telephone on a separate wire; \$40 for each telephone, there not being more than two on a wire; \$30 for each telephone, there not being more than three on a wire, and \$25 for each telephone, there being four or more on a wire."—*Maryland Med. Journal*.

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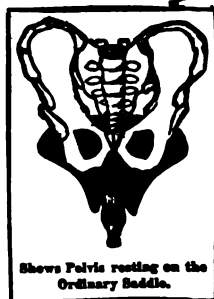
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Pil: Phosphori cum Nuc. Vom.

(W. R. WARNER & Co.)

℞ Phosphori 1-50 gr.
Ext. Nucis Vomice ¼ gr.

DOSE.—One or two pills, three times a day, at meals.

THERAPEUTICS.—This pill is especially applicable in ATONIC DYSPERSIA, depression, and in exhaustion from overwork, or fatigue of the mind. PHOSPHORUS and NUX VOMICA are SEXUAL STIMULANTS, but their use requires circumspection as to the dose which should be given. As a general rule, they should not be continued for more than two or three weeks at a time, one or two pills being taken three times a day.

Pil: Phosphori cum Ferri et Nuc. Vom.

(W. R. WARNER & Co.)

℞ Phosphori 1-100 gr.
Ferri Carb 1 gr.
Ext. Nucis Vomice ¼ gr.

DOSE.—One or two pills may be taken two or three times a day, at meals.

THERAPEUTICS.—This pill is applicable to conditions referred to in the previous paragraphs, as well as to anemic conditions generally, to sexual weakness, neuralgia in dissipated patients, etc.

Pil: Phosphori cum Ferro et Quinia.

(W. R. WARNER & Co.)

℞ Phosphori 1-100 gr.
Ferri Carb 1 gr.
Quiniaz Sulph 1 gr.

DOSE.—One pill, to be taken three times a day, at meals.

THERAPEUTICS.—The PHOSPHORUS increases the tonic action of the iron and quinine, in addition to its specific action on the nervous system. In general debility, cerebral anemia and spinal irritation, this combination is especially indicated.

Pil: Phosphori cum Ferro et Quinia et Nuc. Vom.

(W. R. WARNER & Co.)

℞ Phosphori 1-100 gr.
Ferri Carb 1 gr.
Ext. Nucis Vomice ¼ gr.
Quiniaz Sulph 1 gr.

DOSE.—One pill, to be taken three times a day, at meals.

THERAPEUTICS.—The therapeutic action of this combination of tonics, augmented by the specific effect of Phosphorus on the nervous system, may readily be appreciated.

Pil: Phosphori cum Quinia et Digital. Co.

(W. R. WARNER & Co.)

℞ Phosphori 1-50 gr.
Quiniaz Sulph ¼ gr.
Pulv. Digitalis ¼ gr.
Pulv. Opii ¼ gr.
Pulv. Ipecac ¼ gr.

DOSE.—One or two pills may be taken three or four times daily, at meals.

THERAPEUTICS.—This combination is prescribed in cases of consumption, accompanied daily with periodical febrile symptoms, quinine and digitalis exerting a specific action in reducing animal heat. Patients should, however, be cautioned as to the use of Digitalis, except under the advice of a physician.

Pil: Phosphori cum Digital. Co.

(W. R. WARNER & Co.)

℞ Phosphori 1-50 gr.
Pulv. Digitalis 1 gr.
Ext. Hyoscyami 1 gr.

DOSE.—One pill may be taken three or four times in twenty-four hours.

THERAPEUTICS.—The effect of digitalis as a cardiac tonic renders it particularly applicable, in combination with phosphorus, in cases of overwork, attended with derangement of the heart's action. In excessive irritability of the nervous system, in palpitation of the heart, valvular disease, aneurism, etc., it may be employed beneficially, while the diuretic action of digitalis renders it applicable to various forms of dropsy. The same caution in regard to the use of digitalis may be repeated here.

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THE
Cincinnati Lancet-Clinic.

A Weekly Journal of Medicine and Surgery.

New Series Vol. XL.

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Whole Volume LXXIX.

Original Articles.

SLEEP.

BY GEO. J. MONROE, M.D.,
LOUISVILLE, KY.

"Blessed, thrice blessed, be he who first invented sleep."

The preliminary feeling of sleep is languor, a tired feeling, drowsiness, a lack of muscular control. This we observe in church if it is poorly ventilated and the preacher is dull and prosy. The head begins to nod; all muscular action is not lost at once, but after nodding for some time the chin falls upon the breast. Soon the person has passed from all external impressions and is sound asleep.

The muscles are said to lose their power in this order. Those moving the arm and hand seem to be the first to lose their action. If in church the party is holding a cane, prayer- or hymn-book, they are liable to drop upon the floor. If the arm, by an effort, is resting upon anything before the person falls asleep, it will, on sleep taking place, fall by the side or from the position which it occupied. If, as a rule, a person falls asleep standing the muscles of the legs relax and he is apt to fall. There are exceptions to this muscular relaxation, for many holding substances during their last waking thought will cling with strong grasp to these substances when they sleep. The hand will be clinched upon it, and it requires quite a force to unclasp it. This force usually is sufficient to awaken the sleeper. Soldiers have been known to fall asleep upon the march from sheer exhaustion, and still continue to march.

The first of the special senses to lose

control, I believe, is vision. In the human the eyelids close in sleep and thus stop or shut off sight. It is said there are animals who sleep with their eyes open; the rabbit does this. It is maintained that the sight is lost, for by pressing something in front of a rabbit's eyes when asleep it will not notice it—hence does not see. So I imagine, if the lids were to be removed or could not be closed, the sight even then would be the first special sense lost in sleep. A somnambulist or sleep-walker keeps his eyes open, yet he is asleep.

Taste, I think, is the next special sense that is abolished in sleep. I am somewhat doubtful if this sense is entirely destroyed. I have put salt in a person's mouth when soundly sleeping, and upon awakening, though it may be sometime thereafter, he will say he tastes salt. It may be that this is simply taste restored upon awakening. I at one time put a pinch of salt in a boy's mouth and did not waken him for over two hours, but the first thing he said was: "I taste salt, or else I dreamed I had salt in my mouth." I believe in profound, deep sleep, hearing and smell are both abolished.

Feeling, I believe, remains longer than any of the special senses, unless it may, perhaps, be taste. My experiments have hardly been extensive enough to absolutely decide this. I know we can easier awaken any one by touching them than we can in any other way. The next easiest way to waken one is by some unfamiliar sound; thirdly, by smell. A very disagreeable odor, however, may be in a room, and unless it interferes with breathing it will not waken one who is sleeping soundly. Some years ago I tried this, with a number of offensive as well as sweet smelling articles, and the persons did not seem to pay any attention

to them. In one case the slightest touch would waken him, and he would be awake some little time before paying any attention to the smell.

The special senses then, as a rule, we can say are destroyed or suspended as well as the voluntary muscles in sleep. Of course, the involuntary muscles continue their action, and apparently are very little interfered with. Breathing goes on, the heart's action continues, digestion, etc. There seems not to be very much difference in the action of involuntary muscles whether the person is asleep or awake. Of course, if they did not continue their action we would surely die.

In the brain and spinal cord we have a compound action—some parts asleep while others are active. I believe Marshall Hall, or perhaps W. A. Hammond, said the brain and spinal cord sleep. I think this is a mistake, for in some particulars they are much more active than during the waking stage. Notice how much will pass through a person's mind during the opening or closing of a door, or the shot of a gun. A scene which would take a long time to describe will transpire during the first, and a whole battle may be fought during the second, all taking place in an insignificant moment of time.

The brain, I do not believe, originates ideas during sleep, but it is very susceptible of receiving impressions. Perhaps there is actually no increase of power in the brain during sleep, but I think it more than likely it can concentrate thought, as there is nothing particular to divert its attention. During the wakening condition there is always something to divide thought, something to scatter it, as it were.

How rapidly the imagination seems to run during sleep! Sometimes we have brilliancy in the vagaries, but as there is no judgment controlling them during sleep they are pretty apt to be badly mixed and tumbled together; sometimes they possess a little sense, but more often are preposterous and silly. We know very well they lack the accuracy of waking hours, or when the will is directing the imagination and controlling the intellect. The im-

pression upon the mind for the time may be strong, but does not last long.

It has been stated that great mathematical problems have been solved during sleep. I do not believe it. I doubt much if the mind when a person is asleep can originate ideas and carry them to a mathematical conclusion. Generally, in dreaming we notice that the dreams partake of and relate to something that has occurred during the time when the person has been awake. The idea has been deposited in some department of the brain simply to be brought forth in sleep. We notice in dreaming that we can recall some circumstance in the past that the dream calls up and reminds us of. Dreams are made up of past events, and not usually of the future, although in the majority of individuals, if they have what they call a bad, a horrible dream, they think it relates or has something to do with the future. I believe this generally is a mistake. Yet if something does occur in a short time after one has dreamed somewhat similar to the dream they are reminded of their dream and are quite apt to say my dream now is out, or my dream told me so. The occurrence generally is simply a coincidence.

Opium has a powerful effect in arousing the imagination. I have often listened with wonder and even amazement to the miraculous dreams an opium-eater has related. It would almost seem possible that one asleep from opium could originate ideas. I doubt very much if one could have, under any circumstances whatever, such vagaries, such exaggerated ideas, while awake as they sometimes manifest during opium sleep. In a perfectly natural sleep I doubt very much if we dream at all; I do not believe we do. But if we have dyspepsia, constipation, fever, or, in fact, any derangement of the system, we will dream. The memory of things long since forgotten during the waking condition will be called up during sleep in our dreams. We often dream of things which happened twenty-five, or even fifty, years ago. We may not have thought of them during that time, but our dreams recall them. We may dream of committing the most heinous, terrible

crimes during sleep, crimes that would make us shudder during our waking moments. Men will dream of committing murder, arson, theft, and all the crimes forbidden in the decalogue. Refined women will dream of being unchaste, killing their children, etc., and the worst criminals will dream of being angels and saints. This plainly shows that the mind or judgment during sleep is greatly perverted and wrong.

Our dreams are usually in excess or not up to that which would be required of us. They are either exaggerations or below our waking ideas. I do absolutely believe that in sleep the power of controlling the judgment is totally destroyed. We may arrive at opinions, yet they are more apt to be wrong than right. We cannot, in fact, separate right from wrong, and our dreams would be as apt to lead us to do wrong as they would to do that which is right. I am not really satisfied but we would oftener be lead to do wrong by dreams than we would to do right. We often dream of being somebody else, and are holding a conversation with ourselves. We may to some extent comprehend the absurdity of this idea; still, we cannot for a certainty banish from our minds that we are not the other person.

I dreamed once that I was Henry Ward Beecher. This was during the Tilton trial, and I was arguing with myself that it was an utter impossibility for me to be Henry Ward Beecher; that is, to have committed adultery with Mrs. Theodore Tilton. I thought I, Geo. J. Monroe, M.D., told Mr. Henry Ward Beecher, the party which I thought myself to be, that he was human, and if Mrs. Tilton held out any inducement that he might, from the humanity within him, commit the act. Henry Ward Beecher replied that he admitted that he was human and had all the animal passions that mankind possessed. But he looked upon Mrs. Tilton as almost being a child of his own, and no one with this feeling would violate the chastity of his own child. My reply to him was that upon these grounds I thought he was innocent. I have never since this vivid dream been able to convince myself that he was guilty. This

dream, my considering myself Mr. Henry Ward Beecher, and arguing the matter with my real self, had such an effect upon me that I pronounced him innocent, and I could not in any way be convinced he was guilty.

Hammond gives a case of a lady who thought she was Savonarola, and was preaching to a vast audience, amongst which she recognized herself. She thought this was fortunate, as she knew her own faults she could remind her of them very effectually, and so she did, and painted them so black that she wakened herself crying.

Why the judgment is so perverted during sleep we do not understand. It perhaps is occasioned by some little alteration in the circulation during sleep, but this is entirely conjectural. Volition, I think, is entirely abolished during sleep. Sleep is essential, and we must have a certain amount of it to exist. If one could sleep four or five solid hours without dreaming at all, I believe he would obtain as much rest from it as he does from twice that length of time, provided he dreams the most of the time. Dreaming is tiresome and exhausting. How unrested we feel in the morning if we have dreamed much during the night! If, on the other hand, we have had a quiet, dreamless sleep, we are recuperated and rested. We are more ready to perform our daily work and duties with vim and energy. We can accomplish much more physical and mental labor if we have slept well the night before. Sleep is "tired nature's sweet restorer." We, for a fact, are not restored if we have not had it. We should therefore use every effort in our power to procure quiet, restful sleep. The idea of burning a candle at both ends of the night is not healthful. Every healthy adult needs eight or ten hours' sleep in the twenty-four, and if he does not take it he will soon find himself greatly under par.

I do not believe very much in the use of medicines to produce sleep. I never give them if I possibly can avoid it. They do not, as a rule, produce rest absolute or restore tired nature. Such sleep is artificial, more like stupor, and from this condition we do not have rest. I

believe there is nothing which will wear out the nervous system so rapidly as a loss of sleep.

442 W. Walnut St.

GUAIACOL.

S. HERBERT BRITTON, M.D.,
ADELAIDE, O.

I have used the drug, guaiacol, in the liquid and in the tablet triturate forms. There is no doubt about the drug having certain effects when given internally. I should say that it is as positive a drug, in its way, as calomel, and we know that that drug is as positive as anything in the materia medica. Now the objection to the crude drug, guaiacol, must always remain a serious one in the medication of some cases. I have been very anxious, therefore, that the carbonate of guaiacol should prove to be as good as the crude drug. I watched very carefully everything in the way of practical trial of the carbonate. I have read with avidity every favorable statement as to the success of the carbonate in the diseases that the crude drug has proved efficient in. I said to myself that if we could get a tasteless drug of the power and value of guaiacol, we should have achieved one of the greatest advances ever made in materia medica. I have given the crude drug enough to satisfy myself that there was in this (crude) medicine a mine of therapeutic power. So I am very anxious yet that we should be able to get a tasteless preparation of guaiacol, either chemically or otherwise, prepared that will retain the properties of guaiacol.

Have we got it? I am surprised that the only literature I have seen on this subject is that sent out by the firms engaged in the manufacture of the carbonate of the drug. I have myself had something to say in a few medical journals about this wonderful drug, and elicited in one case a statement from one Cincinnati doctor in one of the hospitals, where he had been using the crude drug locally over the abdomen for fevers (continued). He said that he had not used anything else for two years as an

antipyretic except the local application of guaiacol, and that it was a grand success in every case. This was comforting, but we want to hear some more statements about guaiacol. It is a powerful drug, and certainly ought to be cutting a figure, if it is being used at all by the profession. Then why so little literature on the subject?

It is concerning the carbonate particularly that I am trying to find out something. I am very incredulous as to some of the claims that have been made concerning it. It is so exceedingly easy in our present state of civilization to get statements that I would like to see some really "dead in earnest," plain doctor without the appendage "M. D., F.R.S., etc., etc.," say something that he has done with the carbonate of guaiacol. I had a conversation with a good practitioner a few days ago, who does a large business, is strictly in the practice of medicine, is treating diseases from morning till night every day of his life the year around. He has in the last two years used about sixty dollars' worth of the carbonate of guaiacol in all kinds of cases of phthisis. He states to me, "on the dead level," that he believes it to be inert. What? Inert? Yes, sir! What a pity?

It is no wonder that I am after the truth in regard to that drug—the carbonate of guaiacol! If this friend of mine has spent sixty dollars of his own money he has done well. How much money for carbonate of guaiacol do you suppose has been spent in the world during the last two years? Well, I don't care so much for what it has cost, but I would like to know pretty soon what the consensus of the profession is on this carbonate of guaiacol. My own experience has not been extensive with the carbonate. Hence I appeal to the profession. I am a witness to the fact that the crude drug is nothing short of a wonder in some respects. I am aware, from bedside experience, that this drug will do some things that no other drug of my knowledge will do with as little disturbance. It is, moreover, apparently as safe as we could expect a drug of its power to be. It is a positive antipyretic, as well as a very good antiseptic

—internal and external. It is a good drug for phthisis, some think better than creosote. It is a good stomachic and intestinal corrective. The testimony now is pretty strong that it is a good drug for puerperal convulsions; it has been found so by clinical tests—that is, the local application over abdomen. It is a good discutient, as I myself have observed. But I am sorry to say that there are some reasons why I am inclined to think that the carbonate of guaiacol is practically inert. And I can say also that no one would be more sorry than I if it happens that this suspicion is correct.

I would like to get some reports on this drug—the carbonate. I would be obliged, of course, if any one would be so kind as to send them to me personally, but thankful to get them any way.

One thing I might mention, in conclusion: I have learned by experience that the dose of guaiacol locally must be graduated. I once employed thirty minims on the abdomen of a child, aged nine years, in the third week of a typhoid fever, as an antipyretic, and saw the temperature go down promptly to sub-normal and the child have a decided chill. This taught me something with regard to the use of guaiacol. I did not stop using it, but I simply employed from three to six drops, rubbed it on the abdomen, and repeated it as often as required. It is, in this way, a safe and very positive antipyretic. I firmly believe, there being no contra-indications on any other score, that I can keep the temperature any place I want it with guaiacol locally. This, I think, I could do within safe limits. It is true that this can be done also with acetanilide, phenacetine (a nice drug, too, by the way), and many other medicaments. But, in my opinion, there are more drawbacks to any of these than to guaiacol locally. It absolutely does not interfere with any other drug, and is entirely out of the way. I think, when used with plenty of common sense, it is an invaluable drug, locally, to reduce temperature. I do not mean that it should supersede hydrotherapy, but that it is an excellent drug to use in those cases where hydrotherapy cannot, for any reason, be used. And I have seen

a great many cases that, for one reason and another, could not have the hydrotherapeutic measures used on them.

So far as I have observed (and I have watched it through one season), guaiacol is our best drug with which to abort typhoid or other continued fevers. I find that in the form of the Woodbridge treatment it is almost sure to make a mild course of fever and curtail its duration. But I have further found that I can, by using guaiacol in the crude shape and calomel by itself, and both drugs in larger doses than are prescribed in the Woodbridge treatment, have still better results. In fact, if the treatment is begun with the advent of the fever, it is a matter of less than a week, as a rule. Now, in the Woodbridge treatment, I am aware that the carbonate is used. But there are other drugs—antiseptics—that may have something to do with results. Besides, the calomel of itself is almost sufficient to do the business; in fact, I believe that calomel itself, if given in sufficient quantities at an early enough date, would be a hard blow against any continued fever. Be that as it may, we cannot be sure that the carbonate of guaiacol is an efficient drug on the strength of the Woodbridge treatment. We must have more evidence than that. For instance, I have seen a small boy take No. 2 Woodbridge tabs one every hour for *several days* without bringing down temperature, in which case it took one grain of calomel (extra) every day to get it down. Besides, the evidence of a few physicians like that of the one I mentioned would controvert anything that the Woodbridge treatment might seem to show, because the testimony of an active, conscientious physician, who is after the truth strictly, is, after actual trial, certainly in point. Furthermore, the fact that I have found that the crude drug, all things considered, is vastly superior to the carbonate, should have a bearing in this matter. It would show that the carbonate is at least much weaker, and consequently, on account of its expense, more inaccessible to the ordinary mortal. The carbonate of guaiacol is a big drug or it is a big nuisance, one of the two.

Which? We believe it is about time that we knew which it is.

P. S.—The chemical composition of salol would make us think it a drug of high utility. But everybody who has tried it knows that it has no remarkable properties like carbolic acid. Is this the case with carbonate of guaiacol?

A Hospital Bidding Against the Medical Profession.

For years the German Hospital of Philadelphia has been advertising itself as a wholesale rival of the members of the medical profession and trying to break down the last remnant of self-respect and independence of the working classes. Was it for this purpose that the gifts and endowments of the charitable were donated? Is there not some way in which future givers may be warned? Are there not some means of convincing the physicians of the staff that this is highly unprofessional discourtesy and injustice to the private physicians of the city? This is the advertisement dangled constantly before the eyes of the people:

The Board of Trustees of the German Hospital of the City of Philadelphia Strongly Recommend the Following Advantages Offered to the Public.

Mill and Factory Owners, Lodges and Beneficial Associations can secure a bed at the German Hospital for 365 days by paying \$200, and upon averaging the days may have several patients in the Hospital at the same time.

Subscription books can be obtained by working people of both sexes up to the age of fifty, subject to the regulations of the hospital, whereby, on paying an initiation fee of one dollar and monthly installments of fifty cents, each subscriber may be treated in case of sickness entirely free of further charge. Heads of families and owners of factories should particularly recommend to their servants and employees to avail themselves of this excellent facility.

—*Philadelphia Med. Journal.*

For the Relief of Migraine.

Excellent results are reported by Eshner from the administration in this affection of the fluid extracts of gelsemium and cannabis indica. The dose is three to five drops of each, given three times daily, until physiologic action becomes apparent.—*Med. News.*

Translations.

PARISIAN MEDICAL CHIT-CHAT.

BY T. C. M.

Dr. Purjesz Shows the Fallacy of Antitoxine Statistics—The Last Moments of Napoleon by Antomarchi—Some French Medical Anecdotes—Dr. Pietro Pagello—More on Women from Lucine—The Spartan Mothers of America—Foot Ball in Georgia—Matrimony in Ohio.

Dr. Purjesz, at a late meeting of the Budapest Medical Society, boldly claims that the utility of antitoxine injections is far from being proved. Hungarian statistics show that the mortality from diphtheria had fallen from 22,000 to 17,000 in 1895. Yet from 1892 to 1894 it fell from 49,000 to 22,000; this was before the introduction of the serum treatment. Dr. Purjesz then goes on to show the falsity of the claims made for antitoxine as evidenced by the statistics its advocates offer. He shows how fallacious hospital figures are. In conclusion, the doctor claims that the usefulness of antitoxine still remains to be proven. Health department statistics can be twisted and distorted to suit the views of any set of individuals. Statistical evidence is always offered *en masse*, too. It does not individualize cases, and gives neither names nor dates. The only real statistical evidence of value is that of the individual who reports personal experience; then, too, his reputation for professional veracity must be closely taken in question. The brilliant reputation of Koch has been almost ruined by over-zealous doctors, who reported innumerable supposed cures from his remedy. Koch has always been modest and conservative, and not one-tenth part of what has been attributed as his claiming is true. If there is any virtue in serum therapy such virtue can only be proved by the lapse of time and a much larger experience with its remedies. Antitoxine and tuberculine will probably be no longer heard of in ten years from the present time.

Dr. O'Meara, Napoleon's physician at St. Helena, was called away, and Dr. Antomarchi succeeded him. The journal kept by the latter physician has been re-edited by Desire Lacroix. We cull the last of the great Napoleon's remarks on medicine:

"Your nasty prescriptions are good for nothing! Medicine is a blind collection of remedies that kills the poor, sometimes succeeding among the rich; the results of which, taken *en masse*, are more injurious than useful to humanity. Speak no more to me of such beautiful remedies. I am not a man for potions."

If the great French conqueror had been injected a few times with tuberculine and antitoxine he might have had a still higher regard for the science of the art. But Napoleon never heard of the germ theory nor of sero-therapy, or he might have abandoned many a campaign in fear of food and water more than of enemies.

* * *

The foresight of some French servants is beyond belief.

M. X., finding himself seriously indisposed, sent his valet post haste in search of a doctor. After several hours the servant returned.

"You are late in coming back!"

"Yes, sir; the houses of those who attend the sick are far apart."

"What do you mean?"

"Why, sir, I sent the doctor here first. Then I left a note for your lawyer to come as soon as possible prepared to draw up your will. Then I left word at your confessor's to call this evening to give you extreme unction. Afterwards I went to the undertaker to make preparations in case of your funeral."

"What! and I employ Dr. M. T.?"

"True! but I follow his usual programme."

Another anecdote: Dr. M. is a Marseillais of pure blood gifted with much imagination. The other night they talked at the club of highway robberies. "I was attacked not long since," said the doctor. "It was at Capdenac, where I have many very wealthy patients. Four men followed me on the street. They were all attired

in deep black. They attacked me in front of my office and left me for dead on the sidewalk (great excitement among the auditors). Yes, gentlemen, you can never guess the reason of this attack. It was the *vengeance of the undertakers*. Since my arrival in this city the undertaking business has been bankrupted. I never lose a case (profound sensations)."

A Paris physician was lately attacked by that horrible complaint called stone. He supported his sufferings with such resignation and philosophy, that Professor Y. remarked: "I believe he has a case of philosopher's stone."

The microbe of sauerkraut has lately been discovered — of course, in Germany. The discoverer is a Dr. Conrad, who examined cabbage that had been macerated in a vat for twenty-four hours and found a movable bacillus endowed with cilia, that exhaled much stinking gas, developing the marked Teutonic odor so characteristic of kraut. The new microbe has received the name of *bacterium brassicæ acidæ*.

* * *

In a late number of the LANCET-CLINIC, we gave some particulars of George Sand's old medical lover, Dr. Pagello. He was best known as one of the heroes in connection with Alfred de Musset of the novel "Lui et Elle." Pagello died at the age of ninety-one years at Bellune, in Italy. The romance that upset the young poet's life, was a mere incident in the life of the Italian physician. "An episode and nothing more," he declared before his death.

Ah! these naughty doctors! Pietro Pagello was an old pupil of Scarpa and the surgeon Rima. He was one of the first to introduce Lisfranc's operation for lithotomy into Italy. He was an excellent practitioner, a literary man, but a pitiful lover, despite his personal beauty. At the age of eighty years he wrote his personal memoirs without spectacles.

* * *

The *Journal de Médecine de Paris* has resumed its "Causeries de Lucine." It is said there are few living writers who know the inner workings of the feminine soul so well, and none that can

so finely analyze the psychology of the female senses. We give a few extracts on "The Pleasures of the Senses," a study in feminine psychology:

"Woman has a great voraciousness for caresses; she seeks them, and their soft contact flatter and charm, giving her the happiest moments of her existence. Ask the lovely girl who strolls along the streets, glancing at you from dark, amorous eyes, why she smiles so pleasantly. The dimples in her rosy lips are caused by agreeable thoughts; her imaginative brain is filled with a delicious warmth, and her sweet smile becomes to her the source of some exquisite moments of pleasure. Ask the dancer whom you hold in your arms and press against your moving and excited chest why she loves to waltz. It is because she is protected from you by clothing—thin, it is true, but protecting. She is free from dangers and modesty is asleep. She feels sweet sensations; the love of an instant is enjoyed. She forgets the prose of the senses to be ravished by the poetry of abandon. This makes the charm of the waltz to her; it is the perpetual ascension to the height of pleasure, without her fear of after-suffering; it is the continued excitation that not even surfeit can terminate—an *eternal dinner where the dessert never arrives*.

"Man is a rough creature, whose asperities are dangerous; woman is a profound being. Marriage is the fusion of this asperity and profundity, and constitutes the divine and non-platonic love.

"The pleasure of the senses is an inexplicable and unexplainable thing.

"Why does the mouth find pleasure in a kiss? Why does it give one of the most exquisite sensations a woman experiences? Eternal mystery! Strange aberration in the human structure and nature! Nature desires that all caresses be good and pure. '*Seek and you shall find*'—that is the motto of all humanity. After the first known caresses there are others that only children experience.

"At the side of true pleasure modesty must ever stand as sentinel. Two faithful hearts naturally watch over each other. Night was invented that modesty

might slumber and thus give liberty to pleasure; pleasure satisfied makes modesty all the stronger. At the first break of dawn modesty resumes all its ancient rights. Woman, in all her amorous abandonments, has a great fear, at least if she does not desire the creation of a new being. Maternity is the tribute required by nature in compensation for the pleasure it procures. This is why the daughters of Eve so often prefer an old man. He may be kind, gentle and good, and utterly devoid of danger. Yet such reasoning is often false, and the source of frequent feminine self-deception."

Lucine at times becomes too fervid, too tropical, entirely too warm, to bear a close English translation. Balzac is said to have known the feminine heart better than any man who ever lived. Men who desire to know women's hearts the best should then read all of Balzac's novels.

* * *

The *Progrès Medical* pays a high tribute to American mothers in a recent number. It states:

"A surprising protest, considering from whom it emanates, has been raised against the suppression of the game of foot-ball in the State of Georgia. The mother of a young man named Gamman, whose death following injuries in the game between the Universities of Georgia and Virginia had provoked a legislative act to stop the foot-ball game, requests that the death of her son should not serve as an argument against the development of an athletic education in the State University. The letter written by Madam Gamman has been widely translated in the journals of continental Europe. She shows herself to have the sterling common sense possessed by all American mothers. She writes:

"You will confer a great favor on the Gamman family, if, by your influence, you can prevent his death from serving as an argument in prejudice of athletic sports and their progress in the University. His affection for his college and the interest he took in virile sports, outside of which he judged it impossible to attain the superior type of

humanity, was well known to his comrades and his friends, and he would be very sad were he to know that he was the cause of such a sacrifice. Permit me, then, to request that the death of my son shall not serve as a pretext to oppose that which was the dearest object of his life.'

"That's the kind of mothers they have in America. Such mothers are the makers of true men.

"It is a pity so many of the fathers in the States belong to the damp-hool type, and Ohio seems to have more than its share. *Un Conseil de Revision Matrimonial* is about to be instituted, we notice, in Ohio. This is the State, too, that does not wish women to wear bonnets in theatres, nor to allow stuffed birds for feminine adornment. A Cleveland man desires to regulate marriage in Ohio. The only thing that will ever tend to regulate marriage is education. When the American woman is taught to study sexual physiology on its higher basis she will soon know who and who not to marry. The public-school system is defective in America. There should be no promiscuity of the sexes in educational institutions after the age of ten years. No old maid or spinster should be allowed to teach girls over ten years of age. Only married women or widows should be entrusted with the care of girls of mature age. The average spinster teacher has, as a rule, less common sense than an ordinary Western jack-rabbit. Her education is so deficient in things matrimonial that she has no business as an instructor of girls, who are to be the future mothers of your Republic. How absurd the regulation of matrimony by legal measures!—and such enactments, too, as those usually passed by State legislatures. The next thing in Ohio will probably be to prevent women from wearing corsets. Having prescribed how and where they may wear bonnets, and penalties for using bird feathers as ornaments, it seems to a European outsider that the average Ohio woman would leave that State. We repeat, the defects of society are never cured by laws, but by education. Give married woman the entire control of female education in

your public schools, for all old maids are natural degenerates. The Cleveland member of the Legislature must have suffered from the glandular complications of mumps in his younger days. His new law bears the ear-marks, and long ones at that."

Angina Pectoris and its Relation to Dilatation of the Heart.

Musser (*American Journal Med. Sciences*, September, 1897) says:

1. When dilatation of the heart supervenes in a patient the subject of an attack or attacks of angina pectoris the subjective symptoms may subside; at the same time the physical type of the individual changes.

2. Angina pectoris may occur in a patient who has had dilatation of the heart when the organic condition (dilatation) is removed by treatment.

3. True angina, when it occurs in dilatation of the heart, admits of a prognosis more favorable than when it occurs with other mural conditions, as myocarditis or hypertrophy, without dilatation.

4. Grave cases of dilatation of the heart, conversely to the above, may be looked upon as amenable to successful treatment if the patient should have paroxysms of true angina pectoris.

5. In the treatment of angina pectoris digitalis is of doubtful value, not to be given unless there is an excess of dilatation.

6. The pain of angina appears to be due to increased intra-ventricular pressure, although other causes are no doubt operative.—*University Med. Magazine*.

DR. L. JOSEPH (*D. Med. Ztg.*, No. 39, 1897) regards three symptoms as especially characteristic of neurasthenia, namely: General bodily weakness, pains in the most diverse parts of the body, and insomnia. Trional is mentioned as the best remedy in this case.—*N. Y. Med. Times*.

CREOSOTE, with equal parts of camphorated oil and given hypodermically, is suggested as a sure cure for general septicemia.—*Med. Summary*.

THE


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317 W. SEVENTH ST. CINCINNATI, O.

CINCINNATI, APRIL 16, 1898.

Editorial.**THE BEST PLACE FOR THE SICK.**

The introduction of aseptic methods of practice and the science of bacteriology marked an era of great importance and significance to the world, and particularly to medicine. Both of these methods involved a vast paraphernalia, and covered a field of scientific procedures which seemed to justify and require special facilities, such as could only be found in a hospital, in consequence of which scores of hospitals were opened where none formerly existed, and those already in the field were greatly enlarged. New specialties sprang into existence, which were more or less founded upon bacteriologic and aseptic demands in practice. For the specialists new chairs in medical colleges and hospital staff positions were created; the modern trained nurse was born, and the dear people were given to understand that there was a new medicine and a new medical profession, with new methods of treatment; that the old were musty, out of date, and the only place for the sick that did not

mean death was in a hospital. The hospital fever set in in a virulent form. It caught on in the churches, in benevolent and missionary societies. The infection spread through the schools, and attacked rich and poor alike. Similar to other infections of the human family, the fever has had its remissions and intermissions, but ran a pretty definite course.

For several years little if anything was done to stop or even to mitigate the severity of symptoms as they manifested themselves, until the practice of medicine has pretty nearly petered out, when first one and then another strong man had the temerity to state that surgical operations could be performed in the houses of the people, and as good results obtained as in a well-appointed hospital; that the *enciente* could live as well at home as in a hospital, and that children were just as warmly welcomed and stood as good a chance of living when born at home as in an elaborately conducted hospital. The embarrassing and wonderful paraphernalia of Lord Lister has been laid aside. The specialist has done a good work through a focalizing of exhaustive observations in special fields, but every time he can do his work either in his office or at the home of the patient just as well and just as successfully as in a hospital. This will be questioned by some, but the writer believes he is not mistaken.

The trained nurse finds a vocation as drummer; in this she is an expert, and an up-to-date woman. She has been taught to do things in a clean and methodic way, which is well; she has gained some knowledge of caring for the sick and how to meet some emergencies, but there are few things that she can do better than an intelligent member of a family under the immediate direction of a physician. She is a con-

venience to the doctor, but far from being a necessity, and her very numerousness will in time legate her to a sphere in which she belongs. She is extremely useful in hospital work; this is true, but the pendulum is already swinging back and away from hospitals as the best places for treating the sick. That they are good is not questioned, but they are not as good as an ordinary home. Physicians are awakening to their own interests, and are thinking over the matter seriously when propositions are made to transfer their business to a hospital. Members of a hospital staff are not better practitioners than those who do not hold such positions. Their diplomas do not read differently from those which are held by country physicians. Their experience is worth as much and no more than that of others, and not always is it greater in magnitude.

Consultations are always desirable and generally serviceable to the patient and attending physician, but such consultations need not necessarily be with one who holds a hospital staff position. In fact, in medicine there is no place that has had more of a glamour of superiority thrown over it than hospital staff positions. The thing has been worked and wrought over until those occupying the places have seemed to believe it themselves. The only thing about or in it is that the men in those places are usually industrious students. They take the medical journals and read them, buy new books and study their contents; that is all and nothing more. There are as able men, men of as much skill and judgment, right out in country villages as may be found on hospital staffs. The same is true in regard to medical college professors; they, too, are men who read and study—are obliged to—therefore, are at the front, and that

is the sole and only reason they are in the van. They read, study and write.

Not long ago a professor in one of the largest medical schools in the United States said to the writer: "We have a vacant chair. Name to me a young or middle-aged man for it. The candidate must have had some experience as a teacher, which need be only enough to show his aptitude in use of language in the imparting of knowledge to others. He must have written enough to show that he is a student, and understands not only his subject but himself." The inquirer was a man of international fame, the son of a poor country preacher. In his survey for a man for the place he was not forgetting the man of the country, but knew very well that in country and city alike there are men who are apt to teach, who study and can tell the world what they know.

Hills are green far away. The man in the city and the one in the country are peers of each other. Each has advantages not possessed by the other. In every instance it is the man himself and what he shows himself capable of doing that is wanted.

MEDICAL COLLEGE CLASSES.

In most of the medical schools there is a perceptible falling off in numbers, both in matriculates and graduates, which is due to the lengthened course of study, preliminary educational requirements, and rigidity of final examinations. This is certainly true in regard to the medical schools of Cincinnati, all of which is as it should be, and should be true of the schools in other cities. The teaching and teaching facilities are not better elsewhere than here. There are entirely too many physicians for the population. Lessened mortality-rates indicate a smaller amount of sick-

ness and fewer physicians' bills. The good work of margining down the number who think of becoming physicians should go on until there is a reduction of not less than 50 per cent. of those who enter upon the study of medicine.

A good preliminary education, four years of medical lectures, with corresponding expense account, is a serious matter for the consideration of the man or woman who proposes to knock at the portals of entrance to the medical profession, and will, as it should, deter very many from making an attempt in this direction. The diploma goal and lawful registration being attained, the field is found full of those who have gone before, and the outlook is not very encouraging. Up to this time the student has had his studies, which have held his attention; the alluring flicker of an Aladdin's lamp has stimulated him to press forward and on to the gates of the high calling he hopes to enter upon. The door is wide open. Competition in study he has had, but the battle for bread is new in most instances. With courage and a planting of sufficient sand in his craw, some degree of success may be attained, and usually comes to those who deserve it. To those who deserve it? Yes. Do not all succeed? No. There are those who lack stability and ability to continue on in the work they have entered upon.

It is taken for granted that all young men and women who think of entering upon the study of medicine consult with some practitioner in regard to their doing so. The school to be attended and other matters in this relation that are of vital importance are discussed. It is wise and natural that such consultations be held. In this connection a remark is injected to this effect, that a would-be student of medicine who is married should be discouraged, and that very

forcibly, and those who are unmarried should be plainly told that marital alliances should be held as out of the question and not to be thought of until they have graduated. Those who are married have additional cares which prevent justice being done to their studies; they are unable to look forward to a hospital service that would otherwise be greatly to their advantage. If handicapped for financial resources, there ensue untold hardships and burdens for two people, one of whom is innocent and should not be made to suffer for a lack of judgment displayed by the other. There is no earthly use of a young man arguing to himself that if married he will have that important matter settled, and can therefore better devote his time to his studies, for that is not so. These social relations, the most sacred in life, should only be entered into after mature deliberation, and a positive sight of bread and butter for two. An imagining of two working together and as one, engaged in building up a professional business, is theoretically all very fine, but practically seldom works out well.

The practice of medicine is very much more than a business pursuit. A physician should be a student of life, disease, and science during his professional career. At the same time his professional work in attendance upon the sick should be sufficient for the comfortable support of a family and something more. This support must come from the people, and can only be sufficient when there is an amount of sickness to justify his labors and subsequent bills. Sharp, close competition, commercial methods and establishment of hospitals have made such inroads in fields of practice as to make many former fertile fields barren so far as a sustentation is concerned. These are conditions which

should be laid before the would-be medical student, and the practitioner should be very careful and thoughtful in giving advice to those who inquire in regard to a taking up of medical studies.

THE NEW YORK HOSPITAL.

The Board of Governors of the New York Hospital has determined to dispose of the valuable medical library belonging to that institution. Desirable books in the library have been tendered the New York Academy of Medicine. This will strengthen the Academy very materially, and be of great benefit to the general body of the profession in New York.

The New York Hospital is a great and very valuable institution, but its usefulness to the medical profession is limited to a favored few who constitute the medical staff. It may also be said of it that its abuse of charity has been great, and many a physician's legitimate business has been seriously damaged by its so-called charity work. It has been said for years that a useful clinic patient was never turned away from the New York Hospital doors, or the financial circumstances of such an one inquired into.

EDITORIAL NOTES.

CINCINNATI COLLEGE OF MEDICINE AND SURGERY.—The forty-seventh annual commencement exercises of the Cincinnati College of Medicine and Surgery, April 13, at the Scottish Rite Cathedral, surpassed all previous efforts made by the college. There were twenty-six graduates in the class of '98, more than in any previous class, and the exercises were of a high character.

The stage was artistically decorated with palms and flowers. When the

exercises began the large audience room was packed with friends of the students and the college alumni. After a short musical program by Surdo's Orchestra, the exercises opened with an invocation by the Rev. D. B. Fitzgerald. Then followed an address by Prof. S. C. Ayres, M.D., dean of the college. The speaker complimented the graduates for their exemplary manners, and their close and careful application to study during the years of their course, and paid a high tribute to the faculty and the facilities of the college for learning. The conferring of degrees was performed by Prof. George W. Harper, assisted by Dr. Lewis.

Among the graduates were four women, and Dr. Lewis called especial attention to this fact, saying that the Cincinnati College of Medicine and Surgery had been the first medical school in the country to throw its doors open to women.

The valedictory address was made by Dr. J. Ambrose Johnston.

When the exercises in the main audience room were completed the invited friends and the College Alumni Association repaired to the second story and enjoyed a banquet. There were in all 175 covers. Dr. T. V. Fitzpatrick was the master of ceremonies, and did the honors of the occasion in fitting style.

The toasts were: "Ideals of Medicine," Dr. C. T. Hull; "Abuse of Medical Charity," Dr. L. J. Fied; "Co-Education," Dr. Jessie B. Dillon; "The Future of Medicine," Dr. J. C. Culbertson; "The Class of '98," Dr. H. M. Brown; "The Doctor and Patient," Dr. Max Thorner; "Class Oration," Dr. Geo. J. Fisher.

Dr. Fisher, who is the physical director at the Y. M. C. A., was the recipient of several handsome floral

pieces, presented by the Gymnasium Athletic Club and friends of the association.

The graduates are:

Delta K. Andrews.	Chase B. Moffett.
Fred. B. Baurichter.	Emma Multner.
Herbert F. Belns.	George E. Orebaugh.
Albert Bruegemann.	Elias Hull Porter.
Isaac L. Coy.	Walter C. Roller.
Frank J. Erdhaus.	Harvey Rosenkrans.
George J. Fisher.	Samuel H. Starbuck.
John W. Freshour.	Howard R. Steele.
Harry Y. Graham.	William A. Teveluwe.
Jennie F. Harper.	Marguerite E. B.
David N. Hopkins.	Thompson.
Edward S. Johnston.	Edwin A. Willson.
Katie Krieger.	Frank V. Yancey.
Frank H. Meyer.	

ACADEMY OF MEDICINE.—Monday, April 18: "Deaths (Eight), Surgical, and Causes," Dr. Merrill Ricketts; "Paralysis of the Sphincter in the Clamp and Caution Operation—Muscles of the Pelvic Floor," Dr. John H. Landis.

THE next annual meeting of the Ohio State Pediatric Society will be held in the Assembly room of the Great Southern Hotel, Columbus, on the afternoon and evening of May 3, and morning of May 4, 1898. The session will be called to order at 2:00 P.M.

Correspondence.

THE FREE DISPENSARY ABUSE.

LOUISVILLE, KY., }
April 12, 1898. }

Editor LANCET-CLINIC:

I admire the stand you are taking in regard to free dispensaries, college dispensaries, etc. You have right, common sense, and the interest of the physician at heart. But is it not a fact that in contending against such a power you will only have your labor for your pains?

Some time ago I wrote an article upon the abuse of free dispensaries con-

nected with medical colleges. I sent it to one of our medical journals for publication. It was returned with the comment that I was altogether wrong, and the paper could not appear with propriety in their medical journal. This medical journal was a mouthpiece of one of our medical colleges. Since then he has opened a sanitarium for the cure of the opium habit, with a secret treatment, in our city. Consistency, thou art a virtue! At first he was recommended by the President of our Board of Health and many other prominent physicians. They soon saw where their indorsement was leading them, and removed their names from his recommendation. The sanitarium still goes on without protest, so far as I know. Yet, if I understand our State medical law, the M.D. who owns this sanitarium is violating not only the code of medical ethics, but violating our State law besides. He has money, as his advertisement proves; he, referring to one of our prominent banks, stating that the bank would endorse him for twenty-five thousand dollars.

Is the code of medical ethics of no account? Is our State medical law of no account? It seems not.

Keep up the fight. You are in the right. If money has privileges not to be interfered with, then those who have no money ought to have some rights, it appears to me.

Respectfully,

GEO. J. MONROE, M.D.

442 W. Walnut St.

ENDORSED.

FAIR HAVEN, O., April 11, 1898.

Editor LANCET-CLINIC:

It struck me as funny that fourteen men were going to do the LANCET-CLINIC up by withdrawing their subscription. Well, whenever they do that notify me, and I'll get my competitor to attend to my practice and I'll never come home until *I get fourteen new bona fide subscribers for the LANCET-CLINIC.*

Yours,

HUGH F. LORIMER, M.D.

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of February 28, 1898.

The President, W. E. KIELY, M.D.,
in the Chair.

W. EDWARDS SCHENCK, M.D., Secretary.

TELEPHONE 1981.

The evening was devoted to case reports with discussion.

Hernia of the Pregnant Womb.

DR. P. M. ASHBURN: Hernia of the pregnant womb is sufficiently rare, interesting and serious to make every case of it observed worthy of report and record. The references to the subject in text-books on obstetrics are usually very slighting, and are not infrequently conspicuous by their absence. There is, however, one very good article on the subject in American medical literature, that of Dr. S. S. Adams, read before the Washington Obstetrical and Gynecological Society in November, 1888, and published in its transactions, and also in the *American Journal of Obstetrics* of March, 1889. Adams reviews the subject and collects all the cases he was able to find reported up to that time, and concludes his interesting article with a table summarizing the cases as shown on the following page.

I do not wish to go over his ground, as his article is sufficient, but will report my case, first stating, however, that I have found two cases of *ventral* hernia reported before his writing but not included by him, one reported since and my own, which is, therefore, I think, about the twelfth case to be reported. I did not look for the records of other varieties. The cases I found that were not reported by Adams are as follows:

Thibaut, "Observation sur une hernie ventrale enorme, complique avec la grossesse," *Jour. de Med. Chir. Pharm.*, etc. Paris, 1761, xiv, 365.

T. R. Fisher, "Complete Antever-

sion of Uterus with Ventral Uterine Hernia," *Ohio Medical Recorder*, Columbus, 1879-80, iv, 175-198.

I did not have access to either of these reports, but think the presumption fair that they should be included. As to the progress and outcome of the cases I know nothing.

Sperling, in 1890, reported a case in the *Arch. f. Gynäk.*, Berlin, Vol. xxxvii, which was translated in the *Annals of Gynecology and Pediatrics*, Philadelphia, 1890-91, iv, 12-15. This was the case of a woman who had had two children, one delivered after craniotomy, the other by Cæsarian section. In this pregnancy the womb projected through the hernial opening, and when the woman stood it sank and covered the genitals. Labor occurred at about the end of the sixth month. The woman was in labor three days. Dilatation of the os was very slow, and was aided by colpeurynters and gauze packing. Birth was followed by retained placenta and severe hemorrhage, but the puerperium was normal and she recovered.

My own case is as follows:

Mrs. A. C., aged thirty-six years, been married fourteen years; had nine pregnancies, including the present, and has five living children. Two children died of cholera infantum, and the eighth pregnancy terminated in a still-birth at the eighth month.

Family history negative.

Personal history: Has had no other illness than that of child-birth. Menstruation began at twelfth year, and was always regular. For the first three years it was painful, but afterward was not. She has always been rather heavy for her height, but especially so in the last three years. After the birth of her fourth child she weighed, in health, 140 pounds. Her first six pregnancies and labors were normal. At the birth of her seventh child the forceps was used. In her eighth pregnancy she had monthly flows from the sixth month. The child was born at the eighth month. The physician then in attendance told her her womb was tilted forward. In none of her pregnancies, however, did the womb or the abdomen hang so low as this time.

Present pregnancy: The patient missed her menstruation in August, but in September had some flow a week after her regular time. After that she had a bloody flow after ironing or other heavy exertion. In early October her weight was 200 pounds. In the first week of December she first noticed fetal motions. From that time forward she had a sensation of great weight and dragging pain in the lower abdomen, with marked pain in the back and groins, and she wore an abdominal support of her own devising. The abdomen hung lower and lower, and pressed so heavily on the thighs as to cause pain in them and to interfere greatly with walking. The week before Christmas she began to have a profuse watery vaginal discharge, at times blood-tinged, and necessitating the use of six napkins daily. Some time after Christmas she had a severe attack of vomiting and purging.

I first saw the patient on February 15, in consultation with Dr. Jonah Mc-Millan, who had had charge of her since early in December, and had elicited the history about as given above, but who had been unable to feel the fetal motions

or hear the fetal heart, as had also other counsel. My notes of the examination are as follows:

Patient is a large, fleshy woman of about five feet five inches in height, and apparently weighing considerably over 200 pounds. Her face looked puffed and waxy. Through her clothing the abdomen seemed to hang almost to the knees. Undressed and in bed she was seen to have slight pre-tibial and pedal edema. As she lay on her back with the abdomen exposed it was seen to be very large and pendulous, resting on the thighs and completely hiding the genitalia. The lower part was somewhat pyriform in shape, dark in color, dull on percussion, hard and elastic to the touch. It was easily recognized as the enlarged womb, and fetal motions could be felt and fetal heart-sounds heard over it. It was evidently part of the contents of a large hernia, the coverings of which were so thin that through them the surface of the womb could be plainly felt, the pulsation of the vessels on its surface counted, and the motions of the intestines, which were also in the hernia, plainly seen as well as felt. The hernial

Reported by.	Variety.	Time of Diagnosis.	Treatment.	Result.	
				Mother.	Child.
Fisher.	Right inguinal.	Sixth month.	Cæsarean section.	Death second day.	Saved.
Pol.	" "	.....	" "	Death third day.	"
Ledisma.	" "	.....	" "	Saved.	"
Sennert.	Left inguinal.	Early.	" "	Death.	"
Skriver.	" "	"	" "	Saved.	"
Rektorzik.	" "	Fourth month.	" "	Death.	"
Scanzoni.	" "	"	Induced abortion.	Saved.	.....
Winckel.	" "	Early.	Porro's operation.	"	Stillborn.
Olshausen.	" "	Late.	Spontaneous delivery.	"	Saved.
Doringius.	Crural.	Early.	Cæsarean section.	Death.	"
Leotaud.	Umbilical.	Eighth month	Support.	Saved.	"
Murray.	"	"	Natural.	"	"
Olliver.	"	Ninth month.	Support.	"	"
Hagner.	"	During labor.	Forceps.	"	"
Ruysch.	Ventral.	Early.	Support.	"	"
Rousset.	"	Fifth month.	Natural.	"	"
Petit.	"	Early.	Support.	"	Craniotomy.
Kennedy.	"	Ninth month.	.....	.....	.....
Butler.	"	Eighth month.	Support.	Saved.	Saved.
Bell.	"	During labor.	"	"	" (twins).
Fry.	"	Sixth month.	.....	.....	.....
Saxtorph.	"	.....	Natural.	Saved.	Stillborn.
Papin.	Sacro-sciatic.	Non-pregnant.	Laparotomy.	.....	.....

opening could not be plainly outlined, but it was easily seen to be very large and to reach from the umbilicus to the pubes. The umbilicus was not in or of it, however, and it was all below that point. The womb was so tender that the position of the fetus could not be made out by palpation, but the fetal heart sounds could only be heard distinctly in the right side and at what should have been the posterior part of the womb, but what was, in its position of complete anteversion, its anterior part. Vaginal examination showed a capacious vagina, but the cervix was drawn upward so high as to be out of reach of the examining hand. As stated, the anteversion of the womb was extreme, the fundus being the lowest part and the cervix apparently the highest.

An effort was made to replace the womb in the abdomen, but it caused such pain that I desisted after only slightly improving the position, and advised the patient to remain in bed. The examination of urine passed that evening showed nothing abnormal.

The following day I was sent for, and on my arrival found that she had given birth to a female child of not more than seven months' gestation. The womb was in the abdomen and apparently in normal position, and could be felt through the hernial opening. Pains had come on in the night, probably induced by my manipulation. The child lived only until evening. The mother has so far gotten along all right. The hernial opening at present is almost a foot in diameter, and I have advised the patient to wear a support and not to have any operation performed. This I did because I thought the chances of a successful outcome and good result of operation very doubtful in this particular case, and the woman will have to do her own housework, so that a recurrence would be highly probable.

We may say, then, in conclusion, that these cases are rare, so far as I can find, this being the twelfth case reported; they are attended with less danger than any form of hernia of the pregnant womb except the umbilical, but in eight cases where data are com-

plete, while all the mothers were saved, four children were lost. In two of ten cases operative measures were found necessary, one craniotomy, one manual separation and removal of placenta. Generally, however, labor is almost or quite natural, and, if I may judge from my own case, the womb returns to the abdomen and to the pelvis as its size becomes normal. Probably in most of the cases an operation for the cure of the rupture will be indicated, but I think each case must be decided on its merits.

DISCUSSION.

DR. MERRILL RICKETTS: I cannot see why the doctor should let this case go without an operation. I recall one case of a man in whom the opening was at least eight inches upon whom my efforts were successful. Another was a woman upon whom Dr. Reed operated; the opening was ten inches in her case. In this case I suggest that a part of the lax abdomen be removed and the opening closed. The doctor has no right to let this woman go without an operation.

DR. WM. JUDKINS: I saw one of Dr. Reed's cases so operated upon; the opening was fully as large as that reported. The case recovered. This was some years ago.

DR. ASHBURN: The reason why I advised against operative measures was that the wound is too large and the walls are so lax and baggy that they would give again with a recurrence of the condition; besides, the woman has a family that is dependent upon her efforts for supports.

I.—Painful Stump, Due to Incarcerated Ulnar Nerve—Specimen.

DR. J. C. OLIVER: This specimen is the end of an amputation-stump which was removed from a patient at Christ's Hospital a few days ago. The arm was amputated twenty-three years ago, because of an injury inflicted by a falling tree. Ever since that time he has suffered excruciating pain localized to the end of the stump. I advised him to have the end of the stump removed in hopes of relieving the condition. He consented to this, and I found, as you see in this specimen, that the ulnar

nerve had been plastered down over the divided end of the humerus and had been caught between the bone and the cicatrix, in this way producing constant pressure upon this nerve. The amputation flaps probably included muscular tissue as well as skin, and when sewn together the nerve must have been placed in the position in which it was found. The specimen is very interesting as showing clearly one of the conditions which may give rise to a painful stump. The patient experienced marked relief from the operation, the last report, a few days since, being that he was entirely free from the pain of which he previously complained.

II.—Carcinoma of the Cecum; Cecectomy; Murphy Button Anastomosis; Recovery.

Mr. L. H. B., aged fifty-six, clergyman, married. The trouble began in August, 1897, when, after eating some green corn, he suffered with symptoms of intestinal obstruction. In a few weeks a second attack occurred similar to the first. Subsequently the trouble became localized to the right iliac fossa and a marked tumor developed in that region. He would be conscious of the stoppage of gas at that point. This obstruction would be relieved in a few minutes and the pain disappear.

I first saw him January 21, 1898, at Christ's Hospital. He was emaciated, having lost forty pounds since the preceding August. His color was bad and his strength much diminished. A hard, freely movable mass could be made out in the right iliac region by palpation. This was not painful or tender. Rectal examination was negative and the urine was normal.

On January 26, an operation was performed. The incision was made in the right linea semilunaris; the cecum and contiguous portions of the large and small intestine was drawn up through the wound and the diagnosis of carcinoma confirmed. The small intestine was very much dilated, while the large intestine was contracted. The entire cecum, with about three inches of the small intestine and an inch and a half

of the large intestine, was removed. The divided ends of the large and small intestine were connected by a Murphy button and a few Lembert sutures used externally to strengthen the line of junction. The bowel was then dropped back into the abdominal cavity and the parietal wound tightly closed with silk-worm-gut sutures. The vermiform appendix did not participate in the carcinomatous process.

The patient made an uninterrupted recovery, the highest temperature after the operation being 99.4°. The button passed on the thirteenth day, and he was allowed to sit up on the fourteenth day.

To the best of my knowledge, this is the first case in which the cecum has been removed in Cincinnati.

On the 11th of March I heard from the patient. He weighs more than he ever did in his life and is in every way vastly improved.

The microscopic examination, made by Dr. H. J. Whitacre, showed the mass to be a colloid carcinoma.

Dermoid Cyst.

DR. J. M. WITHROW: This specimen is a dermoid cyst. The peculiar feature is that it is filled with sebaceous material. It contains a fairly well formed temporal bone, which contains a tooth. The usual amount of hair is also in the cyst. The specimen was removed from a woman, aged fifty years, and occupied the place of the uterus, which was pushed down.

Acute Purulent Otitis Media; Mastoiditis; Pyemia; Death.

DR. J. A. THOMPSON: Mrs. Mary H., widow, aged forty-two years, a brunette, unusually well developed and nourished. She came to my office January 10, 1898, with a profuse discharge of bloody pus from the left ear. She told me that the attack began four days before. There was not the usual history of pain lasting for several days before perforation of the tympanum. The first symptom she noticed of disease in the ear was the discharge, which had begun in the night. There was a slight swelling and some tenderness over the mas-

toid. The patient had been very sick with a cold, but after one call on her physician, Dr. DeWitt, waited until she was able to get out of bed before coming to my office. I had treated this patient for hypertrophic rhinitis two years previously. There was no chronic ear disease. On her first visit to the office the ear was carefully cleansed by means of sterilized cotton and the ear packed with sterilized iodoform gauze. When she returned the next day the discharge had been so profuse that the gauze had slipped out of the ear. The ear was again cleansed and packed by the same method. She complained that the gauze was painful after it had become saturated with the discharge and swollen, so on the fourth day the ear was cleansed by the dry method and boracic acid insufflated. The ear was not packed with the acid. There was some improvement for a few days. The swelling and tenderness over the mastoid disappeared. When the patient returned on the 17th she was much sicker; the discharge from the ear was again bloody, and she had a temperature of 102°.

She was sent to a private room in Christ's Hospital and the future treatment conducted at that institution. Her first day in the hospital the ear was cleansed carefully by gently douching it with sterilized water every four hours. After this douching a little boracic acid was insufflated. From the first careful attention had been given to the coincident inflammation of the nose and nasopharynx. This was treated by sprays of menthol and camphor to the nose and by direct applications of a solution of menthol to the throat.

The patient was very much constipated, and cathartics were given the day she entered the hospital. They did not act at all freely until the evening of the 18th. During the whole of the 18th the patient complained of intense pain in the left side of the head. Her temperature at 6 P.M. was 105.8°. It had dropped four degrees by 11 P.M., after free action of the cathartics and after three five-grain doses of phenacetine had been given.

On the morning of the 19th the temperature had again risen to 105.4°, and

there was considerable swelling in the neck below the mastoid process. There was no swelling and no tenderness over the mastoid itself. In spite of this the mastoid operation was determined upon and was made as soon as possible. That was in the afternoon of the same day. There were present and assisting, Drs. Geier, Pine, DeWitt, Wire and Goode. The ordinary incision was made and the mastoid process laid bare. In chiseling out the oval for the opening of the antrum it was noted that the bone at the lower part of the oval was dark in color and softened, so the chisel penetrated it very readily. After outlining the oval and removing the cortex the attachment of the sterno-mastoid was separated from the lower part of the process. All the lower part of the process was found necrotic and softened. It was carefully but thoroughly removed until we were down to healthy bone in every direction. The antrum was then opened and a probe passed into the middle ear. A piece of sterilized iodoform gauze was placed in the external meatus, the wound packed with gauze and closed except at the lower portion, where the gauze projected.

The patient had a temperature of 104° when she went upon the operating-table. This temperature steadily declined until on the evening of the 20th, twenty-four hours after the operation, it was 99.8°. There was again a slight rise on the morning of the 21st, but the temperature continued to fall, until noon on the 22nd it was sub-normal, being only 97.4°. It had risen to 98.2° by midnight of the same day.

During all this period, the three days following the operation, the patient had complained a great deal of pain in the occipital region of the left side. The night of the 22nd and the morning of the 23rd the temperature began to rise again, and a symptom of grave import made its appearance. That was the disappearance of pain at the time the temperature was rising. The morning of the 24th the patient complained of some dimness or uncertainty of vision in the left eye. Examination showed conjunctivitis in both eyes. The patient counted fingers readily at a distance of

ten feet, so impairment of vision at this time was not great.

On account of the rise of temperature the wound was dressed on the 23rd and found to be in perfect condition.

The morning of the 25th the patient was completely blind in both eyes, and was seen by Drs. Ayres and Goode. The pupils were so contracted that the interior of the eye could not be seen by the ophthalmoscope. Atropine was used persistently for the next twenty-four hours, but the pupils refused to dilate. Through the narrow opening no red reflex could be obtained. The appearance, so far as could be made out, was that of suppurative choroiditis from metastasis. The tension of the eyeball was greatly increased until the time of the patient's death. There was extreme chemosis, requiring free incisions in the conjunctiva to permit escape of serum.

The wound was dressed for the second time on the fifth day after the operation. There was only one small stain of pus on the gauze in the external meatus. The gauze in the wound had been in position forty-eight hours and was not saturated. The external wound, where not kept open by the gauze, was healing by first intention. In only one point in it during the progress of the case was there any pus, and that was around the highest stitch. When the blindness developed, before it could be definitely determined that it was due to suppurative choroiditis, the question of an abscess in the cerebellum was considered. After consultation, though, and especially after it was found that the wrists were suppurating, no further operative procedures were deemed advisable. The usual supporting and stimulating treatment for septic disease was given. The patient also received occasional doses of antipyretics when the temperature went above 103°. The patient's nourishment and the condition of the bowels were carefully watched.

On the morning of the 26th it was found that she was no longer digesting milk, and she was put on a diet of meat broths. On the afternoon of the same day diarrhea began. The stools were very frequent, small and exceedingly offensive. This diarrhea was allowed

to continue until the bowel was thoroughly evacuated. It was then controlled by capsules containing one-fourth grain codeine and five grains of bismuth subgallate given every three hours.

The case continued in the usual course of severe pyemia. The temperature ranged from 101° to 104°. There were suppurative inflammations in the left knee and inflamed patches showing suppuration in the subcutaneous connective tissue over the body. All the joints of the upper extremity became involved.

January 28th there was septic pneumonia at the lower posterior portion of both lungs. On the same day septic peritonitis developed, and the abdomen became very much distended and tympanitic. On the evening of the 28th there was some difficulty in swallowing. The patient complained of a great deal of soreness in the throat, but there was no apparent inflammation.

On the 29th the patient was in a stupor. On the morning of the 30th she was completely comatose, and could not be roused. The afternoon of the same day she was unable to swallow. There was a temporary return of consciousness, changing again into stupor, with death resulting on the afternoon of the 31st. No post-mortem was allowed.

There are several features of unusual interest in the case. The first to be noted is that there was little or no pain before the perforation of the membrana tympani. Pain after the discharge began was persistent and severe. The swelling and tenderness over the mastoid process were never marked, and disappeared before grave symptoms were manifest. The discharge was unusual in character, because the pus was mixed with blood for at least ten days. The temperature of 105.8° was something very unusual in suppurative otitis media. This high degree of fever was probably caused by the pus perforating the cortex at the lower portion of the mastoid process and escaping into the tissues of the neck. The rapid spread of the infection to other portions of the body was something very uncommon in the history of this disease. The metastasis which

destroyed the sight of both eyes was certainly the rarest of complications. The rapid death of the bone was something previous experience would not lead us to expect. This unfortunate case emphasizes the importance of prompt attention to any acute inflammation in the middle ear.

DISCUSSION.

DR. S. C. AYRES: I was asked to see the case by Dr. Thompson, and her eyes presented the following appearance. There was marked chemosis of the conjunctiva of both eyes. The pupils were fixed and irresponsive to light; the pupil was grayish, and there was no red reflex with the ophthalmoscope. The intra-ocular tension was increased, and vision reduced to *nil*. The next day the chemosis increased to such an extent that the conjunctiva had to be incised to give relief. The globes presented the typical appearance of acute suppurative irido-choroiditis. From the fact that vision was lost within two days I could only conclude that the inflammation was due to metastasis or embolism. I have seen cases of metastatic choroiditis where there was a dilated pupil, increased intra-ocular tension and a yellow reflex from the fundus.

DR. C. R. HOLMES: It is not sufficiently clear to me to accept that this was a suppurative choroiditis due to a metastasis, because this case had such contraction of the sphincters that would lead me to conclude that the irritation was farther back in the brain. It is unfortunate that an autopsy could not be obtained.

In reference to the operation, it is unfortunate that in many instances such measures are put off too long, for often when operating upon the mastoid without symptoms of the fact we find the cells broken down. Cases where there is a discharge and blood from ears, which does not subside in a few days, should be operated upon. I do not believe in packing, but prefer a douche of high temperature. One patient, a little boy, received a douche of 120°, but was more comfortable when it reached 130°. Those of high temperatures contract the capillaries. In a

recent case I said I would not operate, but would try the douche for two weeks, at the end of which time he was about the same; I operated, and found the mastoid broken down.

DR. THOMPSON, how long from the commencement of the discharge did you operate?

DR. THOMPSON: Nine days.

DR. HOLMES: Nine days is not too long to wait. If these cases were operated upon earlier we would not have facial paralysis and other results. My remarks are not in criticism of Dr. Thompson.

DR. S. P. KRAMER: The doctor mentions that there was considerable swelling of the neck. How long had this existed?

DR. THOMPSON: Twenty-four hours before the operation.

DR. KRAMER: I desire to suggest that it may have been a pyemia from a phlebitis of the veins of the neck.

DR. L. A. MOLONY: A few evenings ago I was called to see a young woman who was suffering from an acute ear trouble. Upon entering her room she was seated upon the side of the bed, with her head inclined to the left side. The corresponding ear was discharging a profuse, puriform fluid, which I was informed had periodically occurred for the preceding two years, either in the fall or early spring—whenever, in fact, she contracted a cold in the head. Her throat was very sore. Upon no occasion, however, had her trouble been so pronounced as this, although she had always had a physician, and the discharge usually stopped spontaneously in two or three days. In addition to the otorrhea and pain, with a buzzing of that side of the head, the mastoid was so exquisitely tender she would scarcely allow me to touch it ever so lightly. Further, it was very much reddened, congested, with a distinct sense of fluctuation, and an unmistakable swelling. The patient had considerable fever, and vomited. I ordered the ear syringed with a very warm boric acid solution, and, in addition, hot applications over the region. Other treatment was symptomatic.

Not posing as an otologist my reason

for stating this case is to learn whether the condition was merely a temporary one, or whether some of the specialists present would consider an undoubted mastoid involvement existed? The discharge spontaneously subsided in about forty-eight hours.

DR. JOSEPH EICHBERG: Was an examination made of the heart in this case? Were there any evidences of joint involvement? The existence of lesions in the skin and the destructive inflammation of both eyes would argue for an embolic origin of these troubles, such as might be expected to follow an ulcerative endocarditis.

DR. C. E. CALDWELL: I desire to suggest that there may have been a septic thrombus of the lateral sinus, with pressure on the cavernous sinus, thus obstructing the flow from the ophthalmic vein.

DR. THOMPSON: The treatment of purulent otitis media by gauze packing is comparatively a recent method. It is an attempt to treat suppurations in the middle ear as surgeons treat abscesses elsewhere in the body. I have tried this plan in a number of instances with great success. It is not successful in all cases, but in fully one-half it shortens the time of treatment very materially.

In reference to the question of thrombosis of the lateral sinus raised in the discussion, the swelling in the neck was not cord-like, as we have it in sinus thrombosis, but was superficial. The posterior part of the mastoid cells was not necrotic. There were none of the ordinary symptoms of sinus thrombosis. The heart was examined several times, and showed no evidence of any valvular lesion.

I have never in acute otitis media observed such rapid destructive changes in so short a time. The bone was softened and black when operated upon, which was done in twenty-four hours after dangerous symptoms appeared.

Of course, without autopsy, a positive diagnosis of metastatic choroiditis could not be made, but the eyes were examined by two skilled and competent men, and I have every confidence in their opinion that this was the condition, rare as it appears to be.

Selections.

FROM CURRENT MEDICAL LITERATURE.

The Relation Between the Nose and the Sexual Apparatus.

The influence of the sexual organs upon the rest of the body has always been recognized. Some years ago one of our medical sages was in the habit of calling the attention of his students to the influence of sexual excitement on the deltoid muscle, as seen, for instance, in the barn-yard cock, the frog, the stallion and other lower animals, and even in the young men in the lower classes in our cities.

Physiologists have long known that the flavor of wine, or any other taste except a half-dozen of the crudest, is due to the nerves of smell and not to those in the mouth. More recently we have learned that all the finer qualities of the singing voice are possible only when the nose and accessory cavities are in proper condition and properly used. Can we be surprised, then, at evidence which seems to show that the third is equally dependent upon the same organ?

A relationship between the nose and the reproductive organs is very evident in the lower animals, although in man the sense of smell as a sexual guide has been largely replaced by the other senses. But we find that there is an increasing number of cases reported in medical and general literature to show that it is by no means entirely replaced. There is no question that many ideas, even chaste ideas, may be aroused by the sense of smell. Many authors have unconsciously or otherwise used the influence of smell upon sexual impulses in their romances. In Zola's realistic pages the reflex value of odors is frequently made prominent.

Is it not to be expected that these two sources of delicate nervous impulse, the nose and genitals, each of which influences the body so profoundly, should influence each other in many subtle ways?

A thorough and scholarly article on different aspects of the subject by J. N.

Mackenzie (*Johns Hopkins Hospital Bulletin*, January, 1898) has recently appeared. Dr. Mackenzie appreciates the interest and importance of the subject, and concludes thus: "The study of the relations between the nose and the sexual apparatus opens up a new field of research, of pleasing landscape and almost boundless horizon, which bids to its exploration not only the physiologist and pathologist, but also the biologist. Above all it brings us face to face with a serious problem of life, an interesting enigma, whose significance it will be the task of the future to divine." The thoroughness with which the author has studied the subject may be inferred from the following quotation: "Sneezing is sufficiently common, particularly during coitus. Quite a number of such cases have come under my personal observation in persons of robust health and whose nasal organs were apparently free from disease." He shows that the subject is not new. He quotes from several ancient Greek and Latin authors to show that it was commonly thought that a man's sexual powers depended upon the size of his nose, and that a woman's virginity could be proved by her throat, and similar observations of the wise men of old. It had also been noted that catarrhal symptoms are often caused by sexual excitement, and it is this part of the subject, in connection with the local changes which take place in the nose during different states of the genital organs, coitus, menstruation, pregnancy, etc., which form the principal part of the paper.

The author covers both the physiological and pathological sides of the question with a thoroughness which makes his paper a valuable addition to the literature of the whole subject. The paper shows incidentally that co-education in our best medical colleges does not, as was claimed by some of its opponents, tend to limit free discussion of subjects which to the non-medical mind might seem likely to cause embarrassment to a bisexual assemblage.

A recent monograph by Fliess approaches the subject from the other direction. He finds certain sensitive spots in the nose which seem to him the

origin of genital troubles, and he reports cases in which he has relieved dysmenorrhea by cocainizing and cauterizing these spots. If his observations are confirmed, we may be able in the future to do away with one of our two common sources of peripheral irritation and treat all of our patients through the nose. And if we can also recover the lost art of the ancients, and add to our requirements the diagnosis of the sexual condition of those we meet by the size and shape of the nose and mouth and neck we shall add greatly to the chastity of the race; for who would dare to transgress if his transgression were to be written on his face.—*Boston Med. and Surg. Journal*.

Treatment of the Pre-Tuberculous Condition in Gland Tuberculosis.

Dr. A. G. Miller (*Med. Press and Circular*) concludes with the following aphorisms:

1. Glandular enlargement has always a cause which ought to be sought for and removed, if possible.
2. If the cause be not removed the enlargement will persist. Such persistence may give occasion for the entrance of tubercle bacilli, and sometimes indicates that tuberculosis has already commenced.
3. Persistent enlargement (after the removal of all discoverable causes) may be considered as a pre-tuberculous condition.
4. This is the most favorable time for removing the glands, there being a reasonable expectation that the wound will not become infected, and the disease will not return. Therefore all persistently enlarged glands should be excised.

Anatomical Note.—I have found it convenient to divide cervical glands into the following groups which differ slightly from the groups given in anatomical works: (1) Those at the back of the neck—the *occipital* group. (2) Those behind the ear—the *mastoid* group. (3) Those in front of the ear—the *parotid* group—which may be again divided into the *superficial* and the *deep*. (4) Those under the jaw—the *submaxillary* group. (5) Those lying along the sterno-mastoid muscle—the *sterno-mastoid* group—

which may also be conveniently divided into the *superior* and *inferior*. (6) Those above the clavicle—the *supra-clavicular* group. These various groups of glands receive their lymphatics as follows (so far as I have been able to make out): The occipital from the posterior part of the scalp; the mastoid from the scalp and ear; the parotid from the front of the head, the ear, and several other parts. This group, however, requires further differentiation, and therefore I have divided it into the superficial and deep parotid groups. The former glands are served by vessels from the front of the scalp, the external ear and meatus; while the latter are connected with the orbit, nose, pharynx, middle ear and upper teeth. The submaxillary glands derive their lymph from the cheeks, lips, mouth, and lower teeth. Of the sterno-mastoid groups, which, along with the submaxillary glands, are those most frequently affected, the upper series is connected with the tonsils, pharynx, esophagus, and larynx; while the lower ones are related to the deeper structures, and are generally found to become affected secondarily to the upper ones. The last group (supra-clavicular) is connected with the intra-thoracic and axillary glands, and derives its lymph from thoracic regions mostly.

The clinical importance of this grouping will be evident if we take some examples.

A child has its occipital glands enlarged or suppurating. Employing the above classification as our guide, we at once examine the back of the head, and will most likely find some eruption or pediculi, or both, as the cause. If the posterior auricular glands (mastoid) should be affected, we examine the scalp and external ear. If the submaxillary glands be inflamed, we look at the lips and into the mouth for the source of irritation. If the glands in the upper cervical region be enlarged, there is a much wider range of investigation opened up. We may find the cause in the nose, throat, or middle ear. Once more, if the glands in the lower cervical region be affected, we will probably find, after investigation of the other groups of glands, that the upper cervical,

or mediastinal, or axillary glands have been diseased first, and that the irritation has spread by contact to those lower cervical and supra-clavicular groups. I have noticed tuberculous disease of these last-named glands associated with old-standing, quiescent, or, perhaps, to all appearance, cured, phthisis.

What Operation Can Do for Cancer of the Tongue.

Butlin (*British Med. Journal*, February 26, 1898) reports a series of 102 cases of cancer of the tongue. He says it has not been his custom to remove the entire tongue as a routine operation in every case of cancer. In only one of his successful cases was the entire tongue removed. In the complete group of 102 cases the entire tongue was only removed sixteen times, and an analysis of these sixteen cases shows that four of the patients died of the operation, and two of these shortly after their return home, and that five suffered from recurrence *in situ*, and that only one case can have claimed to be cured.

The question of the removal of the entire tongue is one of considerable importance. The operation, to say the least, is dangerous; the patient is cruelly maimed, his speech is very defective, he has difficulty in taking solid food, he suffers from the collection of mucus and saliva in the mouth, and if his occupation depends on speech, even in a moderate degree, he is forced to abandon it. There is ample proof that a removal of a portion of the tongue is sufficient to cure a considerable percentage of patients, and to save a much larger percentage from recurrence of the disease within the mouth.

In the removal of the tongue the author always aims at removing the cancer with three-quarters of an inch of apparently healthy tissue around it in every direction.

In many instances the lymphatic glands were found enlarged, within a few weeks of the outbreak of the primary disease.

About 90 per cent. of the cases can be successfully treated by operation with but little fear of recurrence *in situ*,

but of these ninety person thirty will die of affections of the glands of the neck. In order to avoid this secondary recurrence, the author advises the removal of the lymphatic glands of the neck at the time of operation, whether they be obviously enlarged or not.

A careful study of the cases shows that the lymphatics of the tongue are so disposed that they may pass through one or more of four groups of glands: (1) The submental group; (2) the submaxillary group; (3) the parotid group; (4) the carotid group.

With these groups of glands in mind, the author, as a routine treatment, removes all the glands in the anterior triangle of the neck, including the submaxillary salivary gland. The dissection is commenced below and carried upward, and the large vessels are exposed for a considerable distance. This dissection, the author states, requires from an hour to an hour and a quarter. As but few of these complete operations have been performed, the author as yet is unable to draw conclusions as to its ultimate value.—*University Med. Magazine*.

The Mosquito—A Nuisance Easily Abated.

The summer months will soon be upon us and it behooves us to equip ourselves in a manner to meet the discomforts of the season with patience and grace, and in so far as we can escape them. So far as the heat is concerned we have gradually learned that the avoidance of stimulants and the liberal drinking of pure water and cool bathing will enable us to pass through long-continued hot spells quite comfortably.

One of the most annoying features of the latter months of the summer, along the banks of rivers and on the sea coast, is the mosquito, and anything helping us to abate the nuisance is important. Apropos to the subject a recent number of the *Public Health Journal* observes:

"Two and one-half hours are required for a mosquito to develop from its first stage, a speck resembling cholera bacteria, to its active and venomous maturity. The insect in all its phases may be instantly killed by contact with

minute quantities of permanganate of potash. It is claimed that one part of this substance in 1,500 of solution distributed in mosquito marshes will render the development of larvæ impossible; that a handful of permanganate will oxidize a ten acre swamp, kill its embryo insects and keep it free from organic matter for thirty days at a cost of twenty-five cents; that with care a whole state may be kept free of insect pests at a small cost. An efficacious method is to scatter a few crystals widely apart. A single pinch of permanganate has killed all the germs in a thousand gallon tank."

This is a subject of practical consequence to a large part of New Jersey and the Mississippi Valley, for if the mosquito can be suppressed it would add to the value of all property there. The belief has been generally held that the filling in of the meadows with the ashes from nearby cities would prevent the development of these pests, and the providing of a place for the ashes would be another good. It is doubtless true that the potash, which would leach from ashes, will—like a solution of the permanganate of potash—render the development of insect life impossible.—*Med. Mirror*.

A New Staining Method for Sections of the Skin.

Mamarowsky (*Monatshft. f. Prakt. Derm.* xxiv., No. 4) says portions of skin are placed for twenty-four hours in a saturated solution of sublimate, containing 5 per cent. bichromate of potash and 0.6 per cent. sodium chloride. Sections are cut in paraffin. The sections are stained for fifteen minutes in slightly heated picrocarmine, washed in water and then stained thirty minutes in alum hematoxylin. The sections are next stained one and a half minutes in a saturated solution of acid picronitr., until the dark red epidermis can be distinguished from the light rose-colored corium. Wash in water, dehydrate, clear and mount. The horny layer and blood are stained yellow, smooth muscle structure gold-yellow, the small celled infiltration dark violet, the rete Malpighi violet. The staining is very permanent.—*Post-Graduate*.

Bibliography.

THE INTERNATIONAL MEDICAL ANNUAL AND PRACTITIONER'S INDEX. 1898. Sixteenth year.

E. B. TREAT & Co., New York. Price, \$3.00.

This is a valuable reference volume, wherein may be found a digest or brief epitome of the current medical literature of the year 1897. For the use of authors and writers such works are extremely useful, and act as practical time-savers.

TRANSACTIONS OF THE OHIO STATE MEDICAL SOCIETY. Fifty-Second Annual Meeting, held at Cleveland, Ohio, May 19, 20 and 21, 1897.

Edited by R. HARVEY REED, M. D., Columbus, Ohio.

That this book contains almost five hundred pages shows the enormous amount of work performed by the society

during its annual meeting last year. Almost every branch of medicine has at least been touched upon, nervous diseases especially receiving prominent mention. A number of tables have been introduced, among others one on X-ray injuries and another in Dr. Langdon's paper on "The Aphasias," which add greatly to the value of the work. Cincinnati is represented by papers from Drs. J. A. Thompson, S. C. Ayres and F. W. Langdon. The editor is to be congratulated upon his excellent arrangement of the subject matter.

M. A. B.

An International Health Exposition on a large scale will be held in New York shortly. The work is being done under the best auspices, and will no doubt be a credit to those who participate in it and to the city in which it is to be held. The announcement indicates that it will be an important and interesting occasion.—*Med. Age.*

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Original Articles.

PROPHYLAXIS OF PUERPERAL SEPSIS.¹

BY WM. D. PORTER, A.M., M.D.,
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Following the great achievements of aseptic and antiseptic surgery, obstetrics has also taken advanced standing. In maternity hospitals obstetrics has a creditable record, and has perhaps kept pace with surgery. Of private practice, to which we confine this paper, the same cannot be affirmed. There has been a lowering in the mortality and in the morbidity from puerperal infection, but they are greater than they should be. It must, however, be admitted that aseptic midwifery has inherent difficulties which will always be overcome with less facility than the corresponding ones in surgery.

The surgeon can elect within convenient limits the time of operating on a given case. He has assistants and nurses who are familiar with his methods, and who are trained in the details of practical aseptic and antiseptic measures. He confines his work to surgery, enabling him to avoid many sources of infection, and allowing time to prepare for clean work.

Obstetrics is in the hands of men in general practice. They come in contact with cases from which infection may be carried, and cannot avoid them. They are called hurriedly to cases of labor, and elaborate preparations and precautions are out of the question. Cases are frequently difficult, making long-

continued vigilance necessary in preventing infection. The proper preliminary preparation of the patient is often not feasible, because a competent nurse cannot be afforded. But the principal reason that aseptic and antiseptic measures are not applied in obstetrics so strictly as in surgery is because they are not equally and uniformly necessary. It is perhaps possible for a physician to deliver in succession a hundred women in utter disregard of aseptic measures, and still have no fatal result. In surgery the results would be so disastrous as to compel the adoption of better methods.

Men who have had good results in spite of a faulty technique are loth to make radical changes involving additional time and labor. It is too much to hope that all such men will discard such methods; but it is reasonable to believe that no physician entering the profession will have the temerity to adopt such methods in spite of the warnings of his teachers and in the face of the admirable hospital records which have been largely achieved by aseptic midwifery.

It is probably impossible that the mortality-rate in private practice can be brought so low as in a well-regulated maternity hospital, for the two-fold reason that such institutions usually have obstetricians who are more than ordinarily skillful, and because it is impossible to apply aseptic details so thoroughly and so precisely in private as in hospital practice.

Several years ago the obstetric section of the New York Academy of Medicine passed resolutions to the effect that it is the duty of every physician practicing midwifery to surround his cases in private practice with the same safeguards that are used in hospitals; This may be possible among the better

¹ Read before the Obstetrical Society of Cincinnati, December 9, 1897.

classes, but the resources and the environments of a large proportion of private cases do not admit of the elaborate precautions of the hospitals. The aim of the conscientious physician is, perforce, to adopt a plan which embraces the essentials of asepsis, but which is not burdened with unnecessary time-consuming details.

The most urgent requirement is that the physician approach each case with clean hands, and all intelligent physicians try to do this. The difficulty of cleansing the hands would be considerably diminished if we were more careful in avoiding sources of contamination. For instance, in opening an abscess it is not necessary to bathe the hands in pus. By the free use of absorbent cotton or gauze it is possible to avoid soiling the fingers in the least. Moreover, after such an exposure the time to disinfect the hands is immediately. In this way the physician would escape the infection of his clothing, and the infectious material would not have time to get fixed in the epithelial crypts of the skin. Similar precautions regarding hands and clothing should, of course, be observed when attending contagious diseases. Incidentally, such precautions have a good moral effect, and are more effective than any verbal warning in preventing the spread of such diseases. In this connection the propriety of attending a case of labor while treating a case of erysipelas or diphtheria is not considered, but simply the proposition that such care in avoiding contamination and such prompt disinfection after exposure assist materially in securing asepsis by the obstetrician whenever he may be called to a case of labor. Such precautions are at first irksome, but with repetition they become almost automatic, and hence easy.

Bacteriological investigations prove that the external genitals furnish favorable conditions for the development of pathogenic organisms. The deduction is plain, and no one can be justified in omitting this part of the preparation. That the external parts and everything which comes in contact, or which may come in contact, with these parts should be surgically clean, is the belief of all

men who speak with authority. When we consider the propriety of going further and attempting to sterilize the vagina we encounter differing opinions. Bacteriologists find pathogenic organisms in the vagina, but they also find conditions there which are unfavorable for the development of most of these organisms. Some of the latest investigations show that the vaginal secretions during pregnancy have an increased bactericidal power. If we look to statistics to decide whether or not we should use antiseptic vaginal irrigation prior to labor we get both affirmative and negative answers. Those who oppose the method call attention to the great difficulty of sterilizing the vaginal mucous membrane. Their leading argument is that irrigation carries away the vaginal secretions and thus destroys one of the natural safeguards. On first consideration this seems a strong argument, but when we reflect that the inhibiting factor in the vaginal secretions is the acid reaction, and that labor involves the discharge into the vagina of large quantities of alkaline fluids, the argument loses much of its force.

The usual method of delivering the woman on temporary pads which are to be removed after labor involves several conditions which conflict with an aseptic technique. It is often difficult to secure pads which are clean. There is danger of infection from fecal matter. It is very difficult to cleanse the parts of blood and amniotic fluid at the termination of labor. These objectionable features can be eliminated by bringing the woman's hips to the edge of the bed before the end of the second stage and using a large-sized Kelly pad. In this position water from a fountain syringe can be freely used to wash away fecal discharges, and after labor the parts can be easily and thoroughly cleansed.

It doubtless frequently happens that cases which have been properly guarded to the end of the second stage are infected in the delivery of the placenta. After the birth of the child there is often undue haste to terminate the labor. At this time conditions essential to infection exist, and unless the accoucheur assures himself that the external parts

and the finger or fingers which he will carry into the vagina are clean he will likely deposit infectious material in the wounds which are almost invariably present. This danger is greatly lessened by the Crede method, but this method usually requires the insertion of a finger in the vagina. Infection at this time is inexcusable. The delivery of the placenta is properly a deliberate procedure, and there is ample time for thorough cleanliness.

The importance of frequent cleansing of the external genitals after labor, and of keeping a sterilized pad snugly applied, is universally admitted. In many instances it is so carelessly done as to be practically of no value.

In order to carry out an aseptic technique the earnest coöperation of both patient and nurse is necessary. It seems reasonable that such coöperation could be best secured by having printed directions in regard to the preliminary preparation of the patient and the routine duties of the nurse after labor. Such directions have a decided advantage over verbal instructions. They save time. They are less likely to be misunderstood, and are not so likely to omit important details. They can be referred to at any time in case they are forgotten. They are more likely to be observed because, with most individuals, greater credulity and importance attaches to a printed proposition than to the same statement expressed verbally.

We have thus far considered methods of preventing the entrance of pathogenic organisms. While these are the most important factors in preventing sepsis, the discussion would be incomplete without a consideration of the susceptibility of the tissues of the genital tract to microbic invasion and the means of diminishing such susceptibility. It is well known that to have microbic invasion there must be trauma. It is true that in all cases of labor there is trauma at the placental site. In many instances this is the site of primary infection. In fatal cases it is perhaps usually the site of infection, either primary or secondary. In many cases primary infection occurs in a lacerated cervix, or perineum, or in uterine or vaginal tissue that has been

bruised and has cells of low resisting power. The importance of avoiding such injuries is not properly appreciated by many practitioners. The time will come when, in surgery as well as in obstetrics, more importance will be attached to damaged tissue as a factor in the etiology of sepsis. Asepsis does not imply that the wound is free from germs, but only that they are insufficient to produce sepsis. If in a given operation the resistance of the cells is seriously lowered by mechanical violence or interference with the blood-supply, such cells are unusually susceptible to microbic invasion, and the few pathogenic bacteria which would be destroyed or rendered innocuous in tissues of ordinary vitality are enabled to multiply with great rapidity.

If two surgeons could be found who were equally thorough in surgical cleanliness, it would not follow that their results in parallel cases would be identical in regard to sepsis. If one were a better operator, subjecting the tissues to less disturbance and violence, he would have the fewer septic developments. The same is true in obstetrics. Of two men equally thorough in cleansing hands, instruments and patient, the results will be in favor of the man possessed of the best judgment concerning the means to be employed in each case and the most skill in carrying out such plans. If the head is allowed to remain wedged in the pelvis sufficiently long to produce necrosis of tissue, not all the aseptic and antiseptic precautions possible would save the woman from septic manifestations. The premature use of the forceps, causing laceration of cervix; traction in a wrong axis, causing unnecessary bruising of tissue; awkward application of forceps, allowing the edge of a blade to stand out from the head and damage the soft parts; the unskillful closing of a perineal laceration, leaving sinuses for the accumulation of discharges—all such unfortunate blunders furnish one of the necessary elements of infection.

Time does not permit a consideration of the repair of damages. The worst damages, unfortunately, cannot be repaired. I believe the danger is often

augmented by suturing tears in which the tissue has been subjected to long-continued pressure or repeated bruising. Better results would follow packing with sterilized gauze, replaced often enough to insure good drainage.

[FOR DISCUSSION SEE P. 432.]

SOME SEQUELÆ OF ABDOMINAL SECTIONS.¹

BY C. D. PALMER, M.D.,
CINCINNATI.

Abdominal sections are so frequently made nowadays, and for such varying morbid conditions, both diagnostic and therapeutic, that it behooves us to consider what is the best method to secure firm and steadfast union of the incised parietal tissues.

This subject concerns not only the general surgeon, who opens the abdominal cavity for malignant neoplasms, gall-stones, appendicitis, hepatic abscesses, injuries of the abdominal viscera; but also the obstetric and gynecological surgeon, who is to make a Cæsarean section, relieve an ectopic gestation, determine the presence, the kind, the degree, the exact location, and proper management of many pelvic and abdominal outgrowths.

My object in this paper is to refer to but a few of the unpleasant sequelæ following an abdominal section, viz., stitch-hole abscesses, gaping and suppurating wounds, healing by secondary intention, ventral fistulæ, fecal fistulæ, ventral and umbilical herniæ.

It stands to reason that union by so-called "first intention" is the chief desideratum, wherever the abdominal parietes are incised at any time, or for any purpose. How is such healing best secured? A plain, smooth incision of the tissues, with symmetrically-shaped edges; a clean, aseptic condition of the incised walls; a thorough coaptation of the parts, and their maintenance in natural relation for a sufficient time, together with the exclusion of atmos-

pheric germs, are absolutely necessary concomitants for such results.

Drainage-tubes do lead to healing by secondary intention, if allowed to remain *in situ* longer than twenty-four hours. The less frequently utilized, for the shortest period of time allowed to remain, and the smaller in size, other things being equal, the better. But drainage-tubes are a matter of necessity, at times, for the safety of our patients. Therefore, with clear indications for their use, we are as yet not warranted to entirely omit them. When withdrawn, the provisional ligature, inserted at the time of the operation, is tightened.

In almost every case of post-gaping wound, abdominal and fecal fistula, the drainage-tube has been employed. I would not have it inferred that fecal fistulæ are the direct result of drainage-tubes. On the other hand, rather should it be recognized that these fecal fistulæ are resultant from some traumatism of the intestine during the operation, or, more often, to a thinning, a softening, or a rotten condition of the intestinal wall from an old peritonitis, together with the tedious and delicate enucleation of the gut from among its infiltrations and adhesions.

The occurrence of fecal fistula has happened with me on two occasions. One followed an ovariectomy for a large, universally adherent, multilocular, ovarian cyst, in a young German lady of this city, in which case I was obliged, for serious symptoms, to reopen the abdominal cavity and wash it out. The other followed a salpingo-oophorectomy, for a long-continued and dangerous specific pyo-salpinx and its results. Both healed in time. No special treatment beyond cleanliness was required. As a rule, then, these fistulæ spontaneously close within a few months; no operation for them is needed. Unmerited reproach has been cast upon the surgeon by the charge that the opening into the bowel was due to some lack of skill or caution, when in reality the opening did exist already, or occurred unavoidably and spontaneously from a sloughing of the intestine.

Parietal fistulæ are much more

¹ Read before the Academy of Medicine of Cincinnati, March 21, 1898.

common. Undoubtedly the remains of a ligature, not perfectly sterilized when first used, more often made septic by pus or specific secretions after its application, are very common causes.

Stitch-hole abscesses are plainly due to a want of perfect asepticism of the tissues concerned, or the ligatures applied. Therefore, too much attention cannot be given to a thorough sterilization. Silk for ligatures is now largely abandoned, and its place taken by silk-worm-gut. I see no reason why soft virgin silver wire, No. 30, is not equally good. Either is very pliable, strong, and safer than silk in an aseptic sense. Nothing is more easy of withdrawal.

Gaping and suppurating wounds are conditions which go together.

For these aforesaid sequelæ, aside from thorough cleanliness, there are no better applications, in my experience, than the peroxide of hydrogen, boracic acid, iodoform gauze, and in cases the occasional topical use of carbolic acid or solutions of silver nitrate.

When there is no retained, loosened septic ligature at fault in the production or maintenance of an abdominal sinus, all our surgical efforts to close such are unsatisfactory. Repeatedly have I noticed the spontaneous extrusion of silk ligatures about pedicles after months, and without any damage; following which the sinus quickly closes. Personally, I have had no other unpleasant experiences with septic silk ligatures, although I know that in a few instances, in the hands of others, much irritation has followed their presence, and sections have been made again for conditions induced thereby. In recent years there has been a slow-growing disposition, on the part of some operators, to utilize cat-gut exclusively for the ligation of all pedicles and vessels within the pelvis. Cat-gut, thoroughly sterilized and made perfectly aseptic, constitutes an ideal ligature for these purposes; and an improved technique in its preparation gives it to us sufficiently strong for permanent hemostasis.

Ventral and umbilical hernias are due to any of the mentioned causes. We often ascribe their occurrence to

over-exertion. Such is, in a measure, true. Special care to prevent is often neglected. A too speedy removal of sutures is at times at fault. But it is my impression that, while some undue exertion in lifting, etc., is the exciting cause in most instances, there is an underlying favoring condition, due to some imperfect coaptation, or lack of restoration of all the layers of the abdominal walls in their normal relations. Some gaping in some of the underlying layers there has been, and imperfectly uniting structures are easily rent asunder.

Cicatricial tissue, however formed in these cases, is at times the source of irritation, and is never so firm, strong, and naturally elastic as the original tissue, or unions by primary intention. There is always more or less of this kind of tissue in all of these cases of ventral hernia. To secure firm union, it must be excised. While some cases of abdominal hernia can be relieved by care and the application of well-fitting abdominal bandages, nevertheless there is a constant tendency, from many causes, for these ruptures to grow worse, and with the ever-present danger of strangulation of the hernial contents. A complete cure is only secured by an operation. Its execution is ever to be recommended.

What is the best method of closing the abdominal incision?

A great variety of methods have been introduced, some of which are tedious and complex. Three rows of sutures are not uncommon: one in peritoneum, one in muscles and fascia, and one in skin. The figure-of-8 suture has its advocates. Beginning on the left side, we pass through the skin and fascia, then across to the right side, where it is passed downwards through the fascia, muscle and peritoneum, being entered at the fascia and muscle well back from the incised edge. Emerging beneath the peritoneum near its cut edge, it enters at a corresponding point under the peritoneum on left side, then through the muscles and fascia of left side, after which it recrosses to the right, and is brought out through fat and skin of the right side. On drawing the ends tightly together, the effect is

the same as a double row of sutures. Simplicity and thoroughness are requisites. The chief point is to apply the suture or sutures so as to include the retracting parietal fascia and muscles. To secure this, it is well to pull out these tissues. A sufficient number of through-and-through sutures of silk-worm-gut or silver wire is required. Each entering about a half-inch from the incised edge, and three to each inch of incision, is to be so placed in position that it describes an arc of a circle, from above downwardly on the patient's left, and then from below upwardly in another arc, on the opposite side. Such sutures, when tightened, form approximately a circle. The suturing of the peritoneal layers separately with the finest of cat-gut may be done afterwards, but usually it is unnecessary, I think. No suture should be so tight as to afterwards bury itself into the tissues, but traction enough must be made before fastening to insure an accurate apposition of all the underlying parts. Two weeks, as a rule, should pass before their removal.

In operation for abdominal hernia, the same method of suturing is all-sufficient. Success largely depends in the excision of all redundant, stretched, relaxed tissues, and in the removal of all cicatricial formations, and, finally, in the readjustment of the opposing layers in natural relationship.

It is my impression that the linea alba is the chosen place in abdominal incision, for exploration and surgical procedures, when practicable. Other incisions should be obliquely transverse, to parallel the parietal nerves, so as to avoid the partial paralysis of muscles, the weakness of the abdominal walls, and any tendency to hernia.

[FOR DISCUSSION SEE P. 429.]

Strychnine in Emphysema and Chronic Bronchitis.

Strychnine may be employed with the assurance of at least giving comfort if not relief in emphysema and chronic bronchitis. The severity of the cough will certainly be abated.—*Med. Summary.*

SURGERY IN OBSTINATE NEURALGIA OF THE MASTOID REGION.¹

BY ROBERT SATTLER, M.D.,
CINCINNATI.

The ear is occasionally the seat of excessive and inveterate neuralgia. So violent are these outbursts of pain and so effectively do they resist the most rational general and local treatment, that we are obliged to designate this—fortunately, uncommon—expression of neuralgia as *uncontrollable*.

It is a depressing experience shared at one or another time by many physicians and specialists that cases of excessive neuralgia are met with which cannot be relieved by the most approved methods of treatment. In these instances relief such as can be afforded is only temporary and incomplete. Cessation of the prolonged and agonizing suffering results only when the patient's exhaustion in consequence of tedious, unrelieved pain becomes extreme and the disturbance and arrest of the nutritive functions, loss of sleep, etc., finally bring about a general obtunding of the nervous system.

Clinically, it is sufficiently established that certain divisions of the nervous system are more apt to evidence this variety of obstinate, and, in many cases, uncontrollable neuralgia.

The ear, with its complicated supply of sensory nerves and their structural relationship with the other cranial nerves and sympathetic nervous system, does not escape. Fortunately, however, it is among the uncommon localities for the visitation of this expression of neuralgia. If it attacks the ear it is the *mastoid region* which becomes the principal seat and centre of radiation for the pain. The suffering is intense and the paroxysms occur at longer or shorter intervals, and often last several days. The characteristic neuralgic spots or "point" pains are present and the tenderness over the mastoid region is excessive. The patient often shrinks from

¹ Read at the meeting of the Kentucky Midland Medical Society, at Georgetown, Ky., April 14, 1898.

the slightest touch, and the external auditory canal is so sensitive that an ordinary speculum can be introduced only amidst protestations of the greatest suffering.

The region of the mastoid may show surface redness, but, as a rule, swelling or displacement of the auricle, as well as every other evidence of a local inflammatory lesion of the periosteum, bone or pneumatic spaces, are absent. Examination of the middle ear fails to disclose any adequate disturbance of this region. Dental irritation or caries can also be excluded, as well as other causes for neuralgic pain in this locality.

The first and foremost symptom, then, is pain, in and about the mastoid region and radiating to the occiput and into the ear, pain so excessive as to become unbearable, but unaccompanied by fever or constitutional disturbance, except that which necessarily would result from prolonged suffering and exhaustion in consequence of pain that has remained unrelieved and has resisted every form of local and general treatment. Unlike similar neuralgic attacks in other parts of the nervous system, however, the interesting feature in these cases is that cessation of suffering can be achieved by prompt *surgical interference*.

A free incision through the soft parts overlying the mastoid is first made. This permits of the easy removal with chisel and mallet of the outer or cortical layer of the mastoid region. It is essential to open and expose thoroughly the pneumatic cells, but it is inexpedient to penetrate to the deeper ones or to open the antrum.

In illustration of this uncommon variety of neuralgia, I select, from a series of cases which I am about to prepare for publication, the history of a typical case:

The patient was the wife of a fellow-practitioner. She had been a great sufferer for years from neuralgia in other parts of the body, but for severity and unendurable distress, the most violent attacks of intercostal, ovarian and tri-facial neuralgia to which she had been subject, could not be compared to the insufferable and prolonged pain which

localized itself in and about the ear, and which had persisted for weeks in spite of every method of treatment. Her husband assumed that catarrhal changes of the middle ear might account for the pain, and had resorted to inflation and also to the most active anti-neuralgic remedies, but the suffering became so severe that morphia had to be used to obtain relief. This had to be kept up so long that it was evident that the habit, if not already established, would soon be. At this stage of her suffering he brought her to me for consultation.

The examination of the ear was negative. Functional tests were normal. I could not even satisfy myself that catarrhal changes of the middle ear were unduly pronounced. Examination by the aid of the catheter disclosed nothing abnormal. The catarrhal changes of the fauces and nose were not more nor less pronounced than we see in neurotic subjects. *The most exquisite sensitiveness, without redness or swelling, was found over the entire mastoid region, with points of excessive pain when parts over the tip of the process and in the external canal were touched.*

A free opening of the cortex over the entire mastoid region was made. The cells, which contained neither serum nor inflammatory exudate, adjacent to the surface were broken down and the whole region converted into one large cavity without penetrating to the deeper cells or to the mastoid antrum.

The healing and subsequent course offered no features of interest. Relief was complete and morphia was gradually discontinued, and the suffering, which had lasted for many weeks, was arrested completely by the simple operative interference resorted to.

Inveterate neuralgic pain of the mastoid region unrelieved by the ordinary remedies and demanding surgery, which alone affords relief, is not often due to a purely neurotic cause such as we must assume in this case and a limited number like it. In a much larger proportion of cases the pain is associated with and dependent upon distinct pathological processes or their remote sequence in the pneumatic cells and mastoid antrum. In the present

report and brief mention of a typical case, however, we can exclude the existence of such alterations, and are forced to assume a so-called neurotic origin, an exceptional expression of a confirmed state of neurasthenia.

The Significance of Casts and Albumen.

Dr. William Henry Porter (*Philadelphia Med. Journal*) asserted before the New York Academy of Medicine that hyaline casts were often to be found in the urine of individuals who were heavy eaters and possessed an excess of uric acid in the urine. These casts were formed by the secretion of an isomeric albumen through the renal cells, and precipitated by the excess of uric acid. Where there are epithelial or nucleated cells lying on the cast, there is evidence of renal disease. Dr. Porter bases his prognosis in albuminuria largely on the habits and eating of the individual. If the individual is an animal feeder, the prognosis is favorable; but if the patient is largely a vegetarian, the prognosis is more grave.—*Med. Standard*.

Adhesion of the Female Prepuce.

Bacon (*American Gyn. and Obst. Journal*, March, 1898) concludes from his observations and experience that preputial adhesions in the female may produce two different effects: (a) an irritation leading to masturbation and various neuroses; and (b) prevention of development of the glans clitoridis resulting in an eroticism. The reflex nervous centers of the child being less under the control of the inhibitory impulses than in the adult, peripheral irritation gives rise to nervous manifestations in the former which in the latter would have no effect. As preputial adhesions in the female are capable of setting up as grave nervous symptoms as the like condition in the male, Bacon is of the opinion that every female child should be examined and the clitoris liberated at the same period that this or circumcision is undertaken in the male—that is, some time immediately following the separation of the navel.—*Med. Age*.

THE Cincinnati Lancet-Clinic.

A Weekly Journal of Medicine and Surgery.

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J. O. CULBERTSON, M.D.,

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DR. J. C. CULBERTSON,
317 W. SEVENTH ST. CINCINNATI, O.

CINCINNATI, APRIL 23, 1898.

Editorial.

WAR.

It is upon us, and its opening is with all of the intensity of feeling that can pervade the life of a Nation that realizes the justness of its cause.

Monday it became known that the Sixth United States Infantry regiment, stationed at Fort Thomas, had been ordered to embark the next day for Tampa, Florida. A hurry call was sent out to the Loyal Legion to meet the officers of the regiment at their rooms in the Grand Hotel. The response was large, and the reception given by the men who had been through the greatest war of modern times to those about to enter actively in another will never be forgotten by any who were present. It was fraternal and brimful of patriotic feeling. There was a throbbing of earnest hearts in a perfect rhythm. The number of physicians present was notable, many of whom had served in the line, and some had been severely wounded in battle.

The conditions of war have been much changed since the days of '61-'65,

and the change has been as great in the medical service as in any other department. Long-range guns, long bullets and smokeless powder are met by aseptic and antiseptic treatment of wounds. Field hospitals will be in excavations, and as much below the surface of the earth as possible.

The march of the Sixth Regiment through the streets last Tuesday was an object-lesson in many ways: First, to the men of '61. They remembered the old knapsack, with its weight of twenty or thirty pounds; the present seems to be heavier. The guns are of similar or greater weight. The old cartridge-box, with its forty rounds, finds a substitute in a cartridge-belt, which is a great improvement over the old form. In all, the soldier is apparently overloaded in much the same manner as of old. The writer well remembers one of the first and hardest marches in the campaign of '61, when blankets and entire knapsacks were strewn all along the road, and the men got down to haversack, gun and ammunition, and they never got back to the old order in four years' campaigning. Those long, hard marches are not so likely to be duplicated, but it does seem that the new army is overloaded for active service. The exigencies of times, conditions and places will rectify all of this.

Mainly the war will be at sea, where the clashing of the great modern cruisers and battle-ships will become death struggles. The huge iron monsters are quite unlike the old wooden vessels, where there was a chance for life in a defeat; not so under the new conditions.

It has been a matter of sincere regret that there has been so much disagreement in the matter of rank between line and staff officers in the navy. On this account the medical staff of the navy

has dwindled in numbers to such an extent as to seriously cripple the service. This should be remedied as speedily as possible. There are scores and hundreds of well-qualified young physicians who are not only willing but anxious to enter the service, but want to enter on the same plane so far as rights and privileges are concerned with officers of the line.

There are worse things for a Nation than war, and one of those things is dishonor. That should not be tolerated for a moment. So far as information is attainable, it would be dishonorable on the part of the United States to forget the Maine and its crew of valiant men; their blood cries aloud for justice, and the cry is not in vain.

Never in the history of the United States Army did a regiment of regular soldiers receive such an ovation as that given in Cincinnati last Tuesday to the Sixth Infantry. The schools were dismissed, business suspended, and the Chamber of Commerce turned out and marched as an escort. The High School Cadets, in whose veins flows the very best blood of the city, were an additional escort. The whole city was alive and enthusiastically in the streets. Flags floated, guns and hearts were fired. Patriotism loads the atmosphere with its holy perfume. All of which means a determined war.

War is always cruel, and somebody always gets hurt and other somebodies yield up their lives for what is believed to be a just principle. War and bloodshed marks all of the world's historic points and eras, and never yet has there been a national conflict when the medical profession has not done its whole duty, and that with great credit. Nor need it be assumed that because medical men are classed as non-combatants that their lives are in less danger than those in other branches of the service, for that

is not the case. The doctors are right in it, and liable to be struck with bullets and shell much the same as others, and are never out of danger.

Then there are scores and hundreds of physicians who seek a service in the line or in other branches out of preference. This is because opportunities of promotion are much slower and more limited in the medical service than in the line.

THE DENVER MEETING.

Considerable interest is gathering about the promised plan of the committees of last year for the meeting in Denver. First, the railroad rates. One fare for a round trip was promised, with a time limit of one month given. This was urged as simple justice to our association, and it is expected it will be conceded. Then the hotel accommodations were said to be ample. Now the proprietor of a large hotel sends a circular that he cannot give single rooms to one person. Another hotel man announces that good rooms are engaged in nice families near the hotel should the latter be crowded. Eastern men who have been to Denver in conventions are not enthusiastic of the hotel comforts and landlords' kindly interest in the guests, except to make the bill as large as possible. Physicians of all others are liberal in the willingness to pay for every comfort, but grow angry and rebel at petty impositions and over-charges for little trifling services. As a rule, our association receives very generous treatment from the landlords of leading hotels, not always in low rates, but in efforts to make the surroundings comfortable. The Denver managers should make a special effort to correct the impression that the hotels will seize the opportunity to secure every advantage for

themselves. Denver is a picturesque city, and has many unique attractions both in itself and in the surroundings, and a large number of physicians will be anxious to visit it on this occasion.

The programmes of the sectional papers are unusually large and rich in the titles of suggestive topics by strong leading men. This is a good hint of a very large attendance, and expectation of an unusual meeting.

Many physicians will go as agents for invalids who are looking for new climates which promise to lengthen out their lives. Others will have commissions from home investors to look out for new opportunities to safely invest money. Two physicians from Vermont were entrusted by a bank to examine some property in San Francisco at the meeting of 1894. Their report resulted in the final investment of over a million dollars. While the Eastern physician may not have money to invest for themselves, they are often very trusted advisors of capitalists, and persons who have money to put away for investment or for charitable purposes.

Next to bankers, a convention of doctors represents a commercial social side of life which is very influential in a new country. The impressions of a doctor reach back to home life and certain stable conditions of the community which the speculator cannot see. Hence the doctor's opinions of a new country and new surroundings are of more importance than others.

This occasion will certainly be of great importance to Denver and the cities of the neighborhood, as well as to the visiting physician. Outside of its scientific interest, impressions of its value as a health resort, as a home for new activities, new life, and new conditions of prosperity will be carried

away by the one thousand and more physicians that will be invaluable.

The Committee of Arrangements at Philadelphia did their work so well that nothing but warm praise followed. The Denver committee will no doubt make every effort possible to win the same praise. But hotel circulars and railroad advertisements are not very assuring to the average men of some traveling experience. The medical public want the committee's assurances of all reasonable comforts. Now that the stringent times are over the average doctor will want to take a vacation, and Denver and the Rockies will be a most fascinating objective point. T. D. C.

MEDICAL SOCIETY HOMES.

A sensible New England woman, whose husband had been a hard-working physician for forty years, concluded to give the local medical society a building as a memorial, rather than erect a costly monument in the cemetery to her husband's memory. The society purchased a prominent location, and this lady gave over twenty thousand dollars for a building. A few weeks ago this building was formally opened, with appropriate ceremonies, as the Hunt Memorial Building, at Hartford, Conn. It consists of a fine brick structure of three stories, with basement, one large audience-room and two smaller ones, a large library and office, and several smaller rooms for bacteriological and chemical work; also a dining-room, with large kitchen and rooms for a janitor and family. The building is a practical medical club-house for meetings, both social and medical, and for receptions. The building, lot and furniture represent less than forty thousand dollars, and no member of the society has given more than a small contribution to this

work. The society of about eighty members has a home and centre which they can feel proud of. Here they can meet at all times and have access to books and journals, and each one can contribute to the library and journals. The society has a new incentive to gather and mingle, discussing medical topics and socially becoming more and more united.

This Hunt memorial should be copied in every large town and city in the country. If the medical men would unite with the same interest they do to open some free dispensary and hospital to have a home building for themselves it would be accomplished. The actual gain to medical men, both in business ways and socially, would be far greater than any free practice in so-called charities. The profession is behind in concentration of work and interests; doctors should come together and act as a unit in all the larger relations of life.

A large number of medical men belong to secret societies and clubs, and seem to enjoy it. How much greater their interests would be advanced to have clubs and societies of their own, and gather new energies by a closer association with each other! Medical society meetings would take on a new interest when held in club-houses owned collectively.

The evils which beset the practice of medicine require some radical measures to change. The formation of permanent homes with libraries is one very effectual remedy.

T. D. C.

EDITORIAL NOTES.

THE RUSH MONUMENT FUND.—The Rush Monument Committee of the Ohio State Medical Society issue the following:

At the annual meeting of the American Medical Association, in 1884, it was unani-

mously resolved: "That this Association undertake to erect a statue to Dr. Benjamin Rush in the city of Washington, by the members of the profession of medicine in the United States." Year after year the Association has endorsed this project, and yet last June the regular physicians of this country, more than one hundred thousand in number, had after thirteen years of trial succeeded in raising only a little more than \$4,000. Contrast with this the success of the Homeopaths, comparatively few in numbers, who collected in a few years \$75,000 for their monument to Hahnemann, the model for which has recently attracted much attention by its beauty and artistic excellence. Dr. Albert T. Gihon, who has been for years the Chairman of the Rush Monument Committee for the American Medical Association, in his report at the last meeting of the Association spoke thus of him for whom the monument is to be erected: "I do not believe there is another profession, trade or occupation which could claim such a man as its Revolutionary hero which would not long ere this have honored him. . . . Benjamin Rush was no ordinary man. He was not one among ten, nor one among a hundred, but one among a thousand of the patriot sons of America, who sowed the seeds of liberty in this country. He was the one *par excellence*, the illustrious, incomparable physician who, having made himself master of his craft by long study, devoted himself to its higher development, and became famous as its expounder; who when his country required his services, with equal alacrity and whole souled purpose gave them to her and became famous as her defender; who when the crisis was over and the new Republic became an established government, resumed his professional work, and in a hundred ways, and a hundred years in advance of his time, sought to improve social and sanitary conditions, and became famous as a great reformer, philanthropist, and sanitarian; who, doing all this faithfully, performed the duties of his calling as a practitioner of medicine, and sought to minister to his suffering fellow-citizens at the hazard of his own life, which he at last offered up a victim of the prevailing epidemic of typhus, and became famous for his heroic martyrdom. This man claims the homage of every lover of his country, because of his courage in maintaining its liberties at the hazard of his life; of medical military men, especially, because he was the Surgeon-General of the Revolutionary Army, and vigorously insisted upon the proper organization of its medical department; of practitioners of medicine, because of his acquirements and skill as a practitioner; of the literary world, because of his attainments as a chaste and elegant writer; of scholars and professors, because of his abilities as lecturer and teacher."

Beginning to feel that the apathy of the physicians to this project was becoming a disgrace to the profession, the Association, at its last annual meeting, made a special effort to stir up some interest and enthusiasm. As a result a considerable number of individual subscriptions of \$100 each were made, and a

number of State societies, through their representatives, were pledged to raise \$2,000 each before the next meeting in Denver. The President of our State Society pledged Ohio for that amount. Colorado has already raised her \$2,000, other States are actively at work, and certainly Ohio must do her part. Every physician in the State should therefore feel it incumbent upon him to do something that our State may be to the forefront in the amount of contribution toward this fund. Let every one give something, however small the amount. The following constitute the Committee, to any one of whom subscriptions can be sent, or they can be paid to the special representative that has been appointed for most of the counties and for many of the cities and larger towns throughout the State.

WILLIAM E. BRUNER, M.D.,
Chairman, Cleveland, O.
N. R. COLEMAN, M.D.,
Columbus, O.
E. W. MITCHELL, M.D.,
Cincinnati, O.
S. S. HALDERMANN, M.D.,
Portsmouth, O.
C. N. SMITH, M.D.,
Toledo, O.

Approved: WM. H. HUMISTON, M.D.,
President Ohio State Medical Society.

REPORT OF THE HEALTH DEPARTMENT OF CINCINNATI. — Following is the statement of infectious and contagious diseases for week ending April 15, 1898:

	Cases.	Deaths.
Measles.....	12	..
Diphtheria.....	5	3
Scarlet Fever.....	3	..
Typhoid Fever.....	3	2
Phthisis Pulmonalis.....	10	14
Membranous Croup.....	2	..
Pertussis.....	27	5
Varicella.....	2	..
Total.....	64	24

The mortality report for the week ending April 15, 1898, is as follows:

Diphtheria	3
Typhoid Fever.....	2
Whooping-Cough.....	5
Other Zymotic Diseases.....	6—16
Cancer.....	3
Phthisis Pulmonalis.....	14
Other Constitutional Diseases....	3—20
Apoplexy.....	6
Bright's Disease.....	2
Bronchitis.....	8
Convulsions.....	3
Gastritis and Gastro-Enteritis.....	2
Heart Disease.....	8
Meningitis.....	1
Nephritis.....	5
Pneumonia.....	15

Other Local Diseases.....	23—73
Deaths from Developmental Diseases..	11
Deaths from Violence.....	3
Deaths from all causes.....	123
Annual rate per 1,000.....	15.79
Deaths under 1 year.....	22
Deaths from 1 to 5 years.....	13—35
Deaths during preceding week.....	90
Deaths corresponding week 1897.....	96
Deaths corresponding week 1896.....	137
Deaths corresponding week 1895.....	115

THE Annual Report of the Health Department for 1897 is ready for distribution. Any member of the medical profession in Cincinnati who is desirous of having the report, which contains maps indicating the distribution of diphtheria and consumption, will be supplied upon application to the Department of Health, either in person, by mail or by telephone.

ACADEMY OF MEDICINE.—Monday evening, April 25: Case Reports with Discussion.

For Cold.

Wunche (*Therap. Monats.*) reports a prescription for colds which in the early stages is said to act almost specifically. It consists of menthol, one to two parts; chloroform, twenty parts. Four to six drops of this mixture are poured in palm of hand, rubbed in quickly with the palm of the other hand, and then both hands held as a cone over the nose and mouth, inhaling deeply. This may be repeated two or three times daily if needed.—*Virginia Med. Semi-Monthly.*

A RELIABLE FOOD.—Imperial Granum has won the confidence of physicians because many years of clinical experience have proved it to be a form of nourishment that is acceptable to the palate and to the most delicate digestion at all periods of life.

It is successful, not only as an aliment for children, but its rare nutritive excellence in inanition due to mal-assimilation, chronic, gastric and enteric diseases, has been incontestably proven; often in instances of consultation over patients whose digestive organs were reduced to such a low and sensitive condition that the Imperial Granum was the only nourishment the stomach would tolerate, when life seemed depending on its retention.

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of March 21, 1898.

The President, LOUIS SCHWAB, M.D.,
in the Chair.

W. H. CRANE, M.D., Secretary.

[TELEPHONE NO. 1981.]

A Case of Thoracic Aneurism.

DR. WM. JUDKINS: The patient, who is a machinist from the Western part of the city, was in vigorous health until about fifteen months ago. At that time, in setting up some machinery in the University Building, he strained himself. He is well nourished and muscular, and has always been interested in athletics, especially sparring, in which he has some local reputation. There is no specific history. My object in showing the case, aside from its rarity, is to illustrate the exceedingly rapid growth of the aneurism. This cast, which I made of the external tumor four months ago, emphasizes the wonderful progress which it has made in that time. The dyspnea, which is a prominent feature of the case as you see it now, began eight months ago.

Case Reports and Specimens.

DR. B. MERRILL RICKETTS: The patient, who is twenty-nine years old, noticed two years ago some tumefaction of the side of his neck, but it did not cause him any inconvenience until about a month ago, when it began to rapidly increase in size, so that respiration was interfered with and the growth became a serious inconvenience to him in his occupation of conductor, when he was obliged to adjust the trolley. In the operation, the collar incision of Kocher was used and the tumor was found to be a cystic goitre. It was clamped close to the trachea and tied with kangaroo tendon. In removal it was ruptured. The modern operation for goitre

with the method of transfixion is almost bloodless. The tumor was presented to the Academy at a previous meeting.

The second case was operated upon for a scar of the cheek, at the angle of the mouth on the left side, the result of a burn in childhood. It has no especial interest except to show the method I have adopted in removal of cicatricial tissue in this situation. It is an entire success in the removal of the deformity. This is the second case of the sort in which I have employed this incision.

I also wish to show a specimen which illustrates in a striking manner the rapid destruction of bone which sometimes occurs in tuberculous disease. The patient, about seventy years of age, with a marked tubercular history, has had hip-joint disease for eighteen months. In the operation the acetabulum was opened, the ligamentum teres destroyed and the cavity curetted, but the head of the femur was not removed, something which I have not failed to do in previous operations. The specimen shows what has occurred in a few weeks. It was taken out with the finger.

The second specimen is from a patient who has had an old tubercular trouble of the knee. About three weeks ago he had a fall which decided him to submit to an operation, which I advised some time ago. The knee joint, which I have brought with me, shows the marked angular deformity.

The brain, which I wish to present as the third specimen, is a puzzle to me. I have brought it in the soft state, for it has just been removed, and I hope that after it has been hardened and examined I may bring it again before the members of the Academy with a more definite diagnosis. The patient had consulted several physicians before I saw him for the pain in his head, which was a very marked feature of the case. It was only controlled by large doses of codeia and other remedies. I shall give the history in detail when I report the case at some future time. The tentative diagnosis is cystic sarcoma, but microscopic examination has not yet been made.

Specimen of Appendix.

DR. R. C. HILL: I am prompted to present this specimen not so much because of any particular interest attaching to the specimen itself, as because of certain points in connection with the operation which I think of some interest. Briefly stated, the history is a typical one of chronic appendicitis, complicated by a slowly progressive obstruction, the result of adhesions about the appendix.

The patient is thirty-nine years of age, of excellent family history, and his personal history is without interest until ten years ago, when he suffered severely from some intra-abdominal inflammatory affection, from which he recovered only partially after several months. Subsequently to this illness he has been constipated, but for several years was able to relieve the condition by the use of purgatives, but of late it has grown more and more obstinate, until at the time he presented himself the exhibition of purgatives not only fails to secure an evacuation, but is even attended by symptoms of acute obstruction—vomiting, abdominal pain and some shock. His rectum is free from disease of any kind. His entire colon may be very readily distended and outlined upon the abdomen, and in this connection I want to bear testimony to the efficacy of the bicycle pump for distending the large bowel for diagnostic purposes. I am not aware of anyone making this use of this instrument before, but it furnishes a very easy and effective method of inflating the bowel, and is one which may now be put into practice in any place almost.

McBurney's point was always painful, and he suffered pain on walking, especially upon making a false step; he also often had rather sharp pain in his right knee. From these circumstances I thought it not improbable that the adhesions included the psoas sheath and produced irritation of the obturator nerve.

The incision employed in this instance is one which appears to me to possess some points to commend it in certain cases. It is a trap-door incision

through the sheath of the rectus muscle, but, unlike the incision of Jalaguier or of Kammerer, does not involve the destruction of the lower dorsal nerves supplying the rectus, probably the tenth, eleventh and twelfth, and in some instances, where the incision extends low down, the ilio-hypogastric as well; injury of these nerves is avoided by raising the rectus from its bed by separating it from its sheath upon the inner side only and retracting it outward instead of inward, as is done by Jalaguier and Kammerer. The cecum comes almost as readily into view in this incision as it does in the incision of McBurney or in that through the linea semilunaris.

The condition within the abdomen readily harmonized with the symptoms presented: The appendix was tightly bound to several coils of intestine and to the psoas, which seemed to have undergone extensive atrophic change.

The incision was closed by fine cat-gut suture of the peritoneum and transversalis fascia, after which the rectus was replaced and its sheath sutured with silkworm-gut, which included the skin also.

DR. C. D. PALMER read a paper entitled

Some Sequelæ of Abdominal Sections
(see p. 418).

DISCUSSION.

DR. RUFUS B. HALL: The subject of the essayist covers such a broad field and each heading is of such interest and importance that I will not take the time of the Academy to refer to more than one. There are many here who are competent to discuss the subject under its various heads. I shall speak only of the closure of the incision after the operation.

One obstacle to overcome is hernia following these operations. To avoid this has taxed the brain and ingenuity of every operator. The various techniques employed by different men emphasize the fact that we are none of us perfectly satisfied with our present technique in all cases. The method suggested by the essayist of closing the incision with through-and-through sutures of silkworm-gut, carefully placed,

is the one usually employed now. I will say that the large majority of cases thus treated recover and remain well without hernia. This is especially true if the abdominal wall is only moderately thick, which, fortunately, is usually the case. If you take the two extremes, an exceedingly thin abdominal wall frequently seen in very large ovarian cysts and an exceedingly thick wall as in fibroids of the uterus, you will find these cases wonderfully prone to develop hernia after operation if treated as suggested by the essayist. My experience in the treatment of this class of cases has led me to vary my technique, as it no doubt has my colleagues, in an effort to avoid a hernia. I think it is the consensus of opinion with operators that it is the separation of the edges of the fascia that makes the weak point which finally dilates to form the ring of the hernia. To avoid this accident, it is essential to coapt the edges of the fascia and keep them in coaptation until the union is firm. With the through-and-through suture of silkworm-gut alone, in a very thick abdominal wall, we cannot be at all certain that the edges of the fascia are in coaptation when we tie the sutures. Some two years ago I commenced a series of operations by placing the stitches as the essayist has described of the silkworm-gut, getting every part ready for immediate closure. I then took a very heavy piece of silver wire, passed it through the skin and under the adipose tissue down to the fascia at about an inch and a quarter from one end of the incision. To prevent it being pulled through, I clamped a forcep on the end. Threading the other end on a curved needle, I caught one edge of the fascia at the end of the incision, passing the needle from above downward, bringing it out from below upwards on the opposite side. I continued in the same manner, placing the stitches about half an inch apart, from one end of the incision to the other. Bringing out the end underneath the fat and out through the skin an inch and a half from the opposite end of the incision from which we started, I place a clamp on the wire at this end. After thoroughly inspecting the wound to

make sure there is no omentum or intestine between the stitches, and giving the ends of the silkworm-gut into the hands of a trusty assistant to close the wound by pulling upon the two ends of the sutures, I take the two forceps upon the ends of the silver wire and pull it taut. It brings the fascia together perfectly from one end to the other, and the wire is practically straight in its position. It forms a splint and assures coaptation of the fascia for the time it remains. I pass each end of the wire through a small piece of gauze, place a button over the gauze with the wire passed through it and clamp a shot on top of the button. I now proceed to tie the silkworm-gut sutures as we do in an ordinary case. I leave the wire from three to three and a half weeks, and I have never seen any irritation, any pus or inconvenience from it. I remove the silkworm-gut sutures on the eighth or tenth day, somewhat earlier than if I did not use the wire in connection with them. When I am ready to remove the wire I simply cut it below the gauze at one end and pull on the other end. It does not cause the patient as much pain as removal of the silkworm sutures. It seems to have become loosened and it is out before the patient knows I am ready to remove it. I have never had a patient complain from its removal.

This is a very different procedure from that suggested by Dr. Kelly, of Baltimore. He used the mattress suture of silver wire and left it permanently. I used that long enough to be convinced of the fallacy of the method. In a number of cases I was compelled to remove the sutures in from six months to a year and a half afterwards. I have abandoned it altogether. The method I have spoken of to-night insures coaptation of the fascia for three or four weeks; then you remove the sutures and have no trouble. In some cases recently I have substituted kangaroo tendon for silver wire. I tie the end at the first stitch, make a running suture the same as with the silver wire, then tie it at the other end and leave it to be absorbed. I tie the silkworm-gut over it. In no case treated with wire or kangaroo tendon have I had a hernia,

yet the time is not long enough nor the number great enough to say we will not have hernia in some cases. I am convinced that it lessens the danger of hernia, and the time it takes to do it is more than compensated in the additional safety to the patient afterwards.

The other interesting points in the paper, any one of which is of enough importance for a whole evening's discussion, I am certain will be dwelt upon by the other speakers.

DR. CHAS. L. BONIFIELD: There are two or three points in Dr. Palmer's paper to which I wish to refer. The first is the fact to which he has called attention, that fistulous tracts left after laparotomy are frequently due to infected silk ligatures. This often occurs when the silk used is perfectly sterile. The healthy peritoneum has the power of digesting silk as it has the power of destroying a limited amount of infection. The length of time required for it to do this is no doubt variable, and I know of no experiments to show the usual time. I exhibited a fibroid uterus to the Academy last winter, the appendages of which I had removed some years previously, and there was not the slightest trace of the silk which was used in their ligation to be found. But when the peritoneum is much damaged it no longer has the ability to destroy the ligature, and it will sooner or later give trouble. In pus cases we not only have the injured peritoneum, but frequently have to apply the ligature in an infected stump, and we cannot expect it to be taken care of. In doing supravaginal hysterectomy it is more convenient to ligate the uterine artery between the folds of broad ligament, but this leaves the ligature embedded in connective tissue, not peritoneum, and it will surely be heard from.

In regard to drainage, when it is required at all I almost invariably open Douglas' cul-de-sac and drain either with a glass tube or gauze per vaginam. If the tube put in from above does not have to remain more than twenty-four hours, you may succeed in getting immediate union of the incision where it passed through, but if it remains longer you probably will not, and you

have prolonged convalescence and a tendency to hernia as a result.

In closing the abdominal incision it is important for us to bear in mind what structures have the most retaining power, and secure their accurate apposition. The peritoneum and the skin neither have any retaining power, for they are carried in front of the hernia. The fat and the connective tissue offer little resistance, so the only thing we have left is the fascia and the recti muscles. There is no doubt about the muscles coming together, no difference how you close, but the resistance afforded by them is comparatively slight, because it is applied in such a way as to separate their fibres longitudinally. The fascia is the structure that it is of the utmost importance to have unite, and the one that without special care will not be brought together, because it retracts when cut. I therefore bring it together with a continuous cat-gut suture. It is important that the peritoneum be accurately brought together, not as a protection against hernia, but to prevent the abdominal viscera from adhering to the line of incision. I therefore close it with a continuous suture of fine cat-gut. Before applying these cat-gut sutures I introduce the through-and-through sutures of silkworm-gut recommended in Dr. Palmer's paper.

In answer to the criticism of my statement as to the value of the recti muscles in preventing hernia, I wish to say that it is a fact known to every laparotomist that in making his incision when he has divided the fascia he has no further use for his knife until the peritoneum is reached, the fibres of the muscles being easily separated with his index fingers.

DR. R. C. HILL: I had not expected to take part in the discussion of this very interesting subject, but Dr. Reed's reference to the method by which I opened the abdomen in the case reported this evening calls for some further explanation upon the subject. I am sure the doctor did not mean to say that the motor portions of the nerves referred to ran superficial to the external oblique aponeurosis, for such

would assuredly not be the case. It is quite true that the lateral and anterior branches of these nerves do perforate that structure and become superficial, and some of them are doubtless wounded by any incision, but I take it that this is of little consequence, as they have only a sensory function.

The true limitation of this incision, it appears to me, is the suspicion of pus within the abdomen, for it is far too tortuous to admit of proper drainage. Its chief advantage is the security it gives against subsequent weakening along the line of incision, especially in those possessing walls already weakened and flabby.

DR. EDWIN RICKETTS: There are cases that drainage is best facilitated by the use of the glass drainage-tube. One must know how best to adjust one. Four inches of a tube in the abdominal cavity, with one, two or three inches of the other end of the tube (as I have seen) sticking above the skin, is as a formidable weapon illy used. To pull up the fundus of the uterus, place the lower end of the tube in the cul-de-sac, letting the fundus drop back to rest against the tube, is a dangerous procedure. The tube *should not project* above the skin more than the thickness of the tube's collar. It should at least twice daily be turned around *in situ* to prevent any filling of one or more of the perforations in the tube as coming from the intestine.

DR. PALMER: I thank the members of the Academy for the thoroughness of their remarks on my short paper. It was a short but practical subject, and it has been practically discussed.

I would but repeat my suggestions as to the importance of determining the advisability of the use of cat-gut for all pelvic and abdominal work. First, it must be made aseptic; and second, it must be found strong enough for hemostasis, especially about pedicles. I am not an advocate for three rows of sutures in the abdominal walls, either for primary abdominal incisions or for cases of ventral hernia. The figure-of-8 suture is difficult of application, requires extra time, and if not well applied is a very poor suture. Dr. Polk, of New York

City, thinks very highly of it, however. I do not see how either one of these two methods of suturing is superior to the through-and-through method. Certainly, they are not so simple. To secure the full benefit of the through-and-through method, care must be taken to so place them as to form a well-pronounced arc on either side, and to pull out the retracting fascia and muscles with tissue forceps. In all cases of ventral hernia the peritoneum remains intact; so does the skin. The union of the abdominal muscles and fascia are the weakest, and here separation occurs. Such herniæ are constantly increasing in size. To prevent this separation, not only must we pull out the retracting muscles and fascia, but we must suture these layers further out from the line of the abdominal incision. Whether silkworm-gut or silver wire is used, if aseptic precautions are observed these sutures can usually remain in position for about two weeks, and should be firm and steadfast.

Turpentine in the Treatment of Acne Rosacea.

A patient who was suffering from bronchitis as well as acne rosacea was given turpentine as an embrocation for his chest, and when it had produced the desired effect he took it into his head that what was good for his chest might prove useful for his face, which had been affected for a long time and appeared to be quite incurable, as a great many remedies had been tried unsuccessfully for it. The result was that the acne disappeared. His medical attendant, Dr. Betz, being greatly surprised at the result, tried the same remedy on other cases of acne rosacea and found it very efficacious. The application causes, as might be expected, violent smarting and redness, which, however, disappear in a few hours. Dr. Betz suggests that the turpentine has a solvent action on the sebaceous secretion and that it produces a beneficial hyperemia in the dermis, and lastly that it also exerts a disinfecting action which prevents the further spread of the affection.—*Med. Standard.*

OBSTETRICAL SOCIETY OF CINCINNATI.

OFFICIAL REPORT.

Meeting of December 9, 1897.

The President, C. L. BONIFIELD, M.D.,
in the Chair.

E. S. McKee, M.D., Secretary.

DR. WM. D. PORTER read a paper
entitled

Prophylaxis of Puerperal Sepsis
(see p. 415).

DISCUSSION.

DR. C. D. PALMER: This is a very paper, and upon an important subject. I think the doctor made a good point when he referred to the damage done by contusion and bruising of the tissues, lowering their vitality and rendering them more or less susceptible to septic poisons. There can be no doubt that a bruised tissue is more susceptible to septic poison, although there may be no break of the tissue, than a tissue which is not bruised. Let me refer particularly to some of my experience in the hospital. Antiseptic precautions are carried out in every case in the Cincinnati Hospital, and I think we ought to be proud of the record that has been made there. It is no exaggeration to say that the mortality in the lying-in ward of the Cincinnati Hospital some twenty-five years ago, was about 10 per cent., but about ten years since that mortality was reduced to about 2½ per cent. Now it is almost nothing. In the last three years (it is now three years and one month) there has not been a death in this department of the Cincinnati Hospital. That is saying a good deal, bearing in mind that the Cincinnati Hospital receives all kinds of cases at all times and under all circumstances; they are brought there, having been delivered in patrol wagons, in the room down-stairs, before placed in the ward. The last case fatal, more than three years ago, died as the result of a septic condition induced before the patient was received. The reduction of the mortality is only what is going on in other hospitals, as the Sloan Maternity, New York, and the Preston

Retreat of Philadelphia. At the Preston Retreat, I think, every patient is compelled to come some number of days or weeks prior to delivery, when certain precautions are taken. That is not true of our City Hospital, and cannot be, for the City Hospital is for the city poor, patients coming when they may. The Maternity in Paris, France, has a record about as good as the Preston Retreat of Philadelphia. In the Maternity in Paris, the mortality has been about one death in 1,150 cases. In the Cincinnati Hospital, when a woman is received, not to exceed two months prior to her delivery, she is put in the waiting ward and all aseptic conditions are followed out. She has one bath a day in hot weather and two baths a week in cold weather. The vagina is irrigated in all instances, just so soon as labor commences, with the bichloride solution, about 1:4,000 strong, and the interne as well as the nurse exercise all antiseptic precautions. The vagina is again irrigated, so soon as the placenta is delivered, with a large quantity of hot bichloride solution of the same strength. These post-partum injections are very hot to stimulate uterine contractions and abate the post-partum flow. It is a rare thing for a woman in that ward to have a temperature to exceed 100° F. at any time. Of course, if the perineum is torn it is stitched immediately, as it should be in all cases. I have adopted the plan, in recent years, to stitch the cervix uteri if torn much, and if there is hemorrhage from it; sometimes there is considerable hemorrhage from the torn circular artery of the cervix uteri.

DR. BYRON STANTON: Some things that occurred to me when the paper was being read were spoken of by Dr. Palmer. I believe one reason why there has been a decrease in puerperal sepsis in the last few years, as I think there has been, is due to the fact that instruments, when required, are applied earlier than they were formerly, and used better, and the cases are not allowed to drag along until there is injury to the vagina by pressure.

In regard to the prevention of puerperal sepsis, I think the important thing is cleanliness, and the more simple

means with which that can be brought about the better. I think soap and water is about as good as anything. I am opposed to the routine use of bichloride solution, not but there are cases in which it may do good, as where there is some disease of the vagina, some morbid material that can be washed out; but in a woman with a normal vagina the less interference the better. I think many cases of nephritis and injury have been caused by the too frequent resort to strong bichloride injections. I tried intravaginal antiseptic injections for some time in every case, and the cases with highest fever, the cases that gave me the most anxiety, were those in which I used these injections before and after delivery, and since I have quit the use of them I have had better results than before. I believe it is well to keep these cases clean, but that can be done with soap and water better than with bichloride of mercury. Even in cases of the use instruments, I believe, where the vagina is kept clean, we can do just as well or better without the bichloride. No examinations should be made unless the finger is clean. We should wash the hands before an examination as well as after. I think it is the duty of the physician to make an early examination, to make it as thorough as possible, in order to determine the presentation and position, and after that to make very few examinations, the fewer the better. The progress the case is making may be judged of by the exclamations of the woman as well as by the vaginal examination. I am a believer in asepsis, but I am not a believer in the routine use of bichloride of mercury.

DR. WM. GILLESPIE: I would like to ask Dr. Stanton how he would be sure there was not some septic condition already existing in the vagina unless he inspected it. We frequently find, especially in multiparæ, there is a vaginal discharge that is purulent. We are not always sure whether the woman has gonorrhea. Where the vagina is open there is an opportunity for the ingress of bacteria, and the woman often indulges in intercourse, and even if the husband has not gonorrhea you cannot be sure that there are not some germs

on his organ of generation. I cannot understand how a vaginal irrigation could produce septic conditions or temperature.

DR. STANTON: I do not see septic conditions, but we can, I believe, do as well without these injections. I believe many cases of nephritis are due to bichloride of mercury. As to how we can determine whether the vagina is free from germs or not, that, of course, we cannot determine absolutely, except by a bacteriological examination, which is impracticable.

DR. G. B. ORR: Since you have been so kind as to call upon me, I will give you the benefit of some of my ideas based upon experience. In the first place, I may state to you that in now thirty years of practice I never have lost a mother in confinement. I believe that is rather unusual—possibly good luck. I have attended cases from every standpoint, in every kind of house, from the filthiest up to the best. I attended them before we knew anything about such a thing as septic poison, when they were surrounded by rags and rolling upon a bed made of rags, and yet I have never lost a mother.

DR. T. A. REAMY: You mean that you never lost one after delivery?

DR. ORR: Yes, sir; as yet I have the first one to lose. It has been my practice, since the establishment of antiseptics in midwifery, to make use of them. It has been my misfortune to have had more septic trouble since that period than I had before. I do not, however, lay it to the antiseptics; I lay it to the improper treatment by parties surrounding the case. I had one case of septicemia following confinement, where I made use of all the methods of cleanliness in my power, yet I had one of the worse cases I ever had anything to do with, and I traced it to the manipulation of the genitals by the mother. I state this as a practical point to which the doctors often do not look. We wash the genitals and wash our own hands, and instruct the nurses to have everything clean and have antiseptic dressings to surround the genitals, yet this woman insisted upon handling the genitals in trying to help herself. Not-

withstanding I tried to dissuade this young mother, she would get her hands down under the covers and try to stretch the vulva with the hands. I could not trace the infection to anything else. There is no doubt in my mind but the antiseptic treatment is the proper one; whether it is the destruction of these germs or the filth which comes from some other source, all statistics go to prove a lower mortality and the advantages of the antiseptic treatment. Some insist only upon washing out the vagina prior to delivery. That of itself is good, but I think there should be more washing in a case than that. I think the whole body should have a thorough hot bath before. But there is a defective idea, it seems to me, practically, and that is to rely simply upon an injection without going into detail and having perfect cleanliness of the entire body, and everything about the body. My experience teaches me now that the hands of the mother should be made perfectly clean, or the mother should be made to keep her hands away from the genitals unless they are thoroughly disinfected. I now either have hands off or hands clean, one of the two. As to the injection beforehand, we frequently do not get to the case in time to prepare the mother. I had a case not more than three weeks ago, to which I was called, and although I had given instructions to the nurse to give the injection and bath, it was not done. I was called and got in the house just in time. I had an opportunity to wash my hands only when the mother called, "Hurry up, Doctor," and I got to the bedside just as the head was expelled. Based upon my experience, it is of the utmost importance to make use of the antiseptic treatment in its fullest details prior to labor, and after delivery men differ as to the irrigation. Some say, do not touch; others, use boiled water; others, antiseptics. My plan is always to make use of the antiseptics and irrigate for ten days following the delivery. For ten days I make use of vaginal irrigations three or four times, sometimes six or eight times, in the twenty-four hours. I have never had any nephritis from that cause in my cases, and I do not feel

satisfied if I do not irrigate and keep the parts just as clean as possible in all cases.

DR. PALMER: I would like to say just a word more in reference to the matter, that came to my mind since some of the gentlemen spoke. Antisepsis will not take the place of asepsis. Have the patient clean generally and locally before we make use of any antiseptic. It is utter folly to use an antiseptic solution on a dirty patient.

DR. STANTON: Why are they needed on a clean patient?

DR. PALMER: Because germs will stick to the parts, notwithstanding. With the ordinary precautions of general and local bathing, the germs will stick there. To exercise complete asepsis it is necessary not only to have the general bath, but also a local vaginal bath; scour the vagina with green soap as preparatory to any operation. Then the antiseptic is in place.

Now, as to the bichloride doing harm, I think for some ten years or more in the Cincinnati Hospital it has been used. I have never seen a particle of ill-effect under any circumstances from this antiseptic.

DR. REAMY: I would like to ask if the doctor does not think the result has been due rather to good fortune than to the treatment used. In the first place, bichloride of mercury is known to be a rather poor germicide, as compared with carbolic acid. Lister himself said so, and several German experimenters have shown the same thing. If bichloride of mercury is used in a strength sufficient to destroy the pathological germs, staphylococci and streptococci, it is of sufficient strength to produce irritation of the vagina, and a degree of irritation that will set up the very first process of the current of absorption going inward instead of outward. The fortunate thing in these cases is that in a woman delivered for the first time, and therefore suffering some traumatism, the leucocytes are on hand in such numbers and so quickly act, and the processes of repair begin so promptly that the introduction of pathogenic germs in such quantities as to do harm is rendered improbable. All the investigations that

have been made show that the germs present in the vagina in a woman in health, when she is taken in labor, if none have been introduced from without by somebody or some syringe, are protective rather than pathological. They are germs that will do good rather than harm. The introduction of antiseptics into the woman's vagina just before she is taken in labor, simply because she is going into labor and you think she may be torn, is meddlesome midwifery and bad practice. The tear has not occurred when these injections are used. If you have infection, then treat the case as you would under other circumstances, but do not interfere with a natural process. It is not at all likely that the germs are an evolution of our century. I suppose the vegetable kingdom filled the world before the animal kingdom, and there were as many of these micro-organisms when Noah came out of the ark as there are now. It is a great wonder that the world has increased in population, since every child-bearing woman not diseased was in earlier times deprived of vaginal injections. Why should we inject the vagina of a woman in health simply for fear of something? It is the accoucheur's hands that should be cleansed. We are not now speaking of treating septicemia after it has started, nor about treating sapremia. I did not hear the paper, and am simply speaking of suggestions that have arisen from discussions I have heard. If I had to use anything at all I would very much rather use an injection of some form of the tar preparations, creolin or something of that character. Green soap is an admirable thing to use, as the doctor has said. But if you scrub the vagina with green soap for half an hour, as recommended, it will be just in the condition of irritation to absorb. I was going to ask my friend Dr. Palmer, not in criticism, but simply because I know he has a method about it, is the doctor in the habit, if there is any laceration, of stitching it up then and there.

DR. PALMER: I stated that if the laceration is so deep there is hemorrhage, or if it is as deep as sometimes produces hemorrhage. An ordinary tear I would not stitch at all.

DR. REAMY: Without any doubt the line of advance in the future will be by the prevention of traumatism. Some women have traumatism because the forceps are applied too soon, but I endorse every word Dr. Stanton has said in reference to the timely use of the forceps. The woman may have fewer germ fields then to contend with. The mere delay, itself, is an element of danger. Still, there are instances where the forceps are applied too early and then too much force applied, so that the head produces tearing beyond what otherwise would occur. I believe in the skillful and proper use of the forceps, and I have been in the habit of using an antiseptic after those cases. Whenever I would introduce the hand for the purpose of turning, or make a high application of the forceps, it has been my habit to wash out the uterus. I am not sure whether that is always justified. I have done it because I thought possibly pathological germs may have entered the vagina. I recommended it in my lectures, yet I am not now sure that it is necessary, if the forceps and the obstetrician's hands are perfectly healthy and the woman is in a healthy condition. I doubt if even in such cases it is as routine practice justifiable. No normal fluid or secretion is unhealthy or necessarily a germ-breeder.

DR. CHAS. L. BONNIFIELD: I want to compliment Dr. Porter upon his paper. The details given for securing asepsis in labor are good. There is only one to which I would take exceptions—that is, delivering the patient with her hips at the edge of the bed on a Kelly pad. This way may be very satisfactory to the obstetrician, but must be somewhat objectionable to the modest and timid patient, who would wish to avoid the exposure, and fear operative procedures when placed in such a position. This position, I should think, would also interfere with voluntary expulsive efforts on the part of the patient, as there is no way in which she can brace her feet for the effort. I believe that by the liberal use of sterilized towels one can come as near attaining asepsis as by the use of the pad.

DR. GILES S. MITCHELL: I was very much astonished at Dr. Reamy's remarks concerning the feeble antiseptic properties of bichloride of mercury. I do not say that the authors quoted do not bear out the statement of the gentleman, but I am sure the majority of bacteriologists and chemists regard bichloride of mercury as the most powerful germicide we possess. The good results in midwifery date from the period of antiseptics, which commenced before asepsis. Asepsis, however, is more important than antiseptics. Absolute cleanliness is everything in every procedure, whether it is physiological or surgical. Now I remember the time, and it has not been so long ago, when we had epidemics of puerperal fever in this city, and every man in practice encountered cases. That was when we used feeble solutions of carbolic acid. For a long time it was routine practice with me to employ vaginal injections just prior to labor, and for at least a week or ten days following delivery. Since five years I have abandoned that practice. I now use vaginal irrigation only in cases, after delivery, where I am sure there has been considerable laceration, or where I know the patient is in a condition to be infected. I believe in hospital practice it is judicious in every case, as was outlined by our distinguished friend on the left, to employ the vaginal douche. In private practice, where we are pretty sure the patient is clean and respectable, and we believe the secretions are normal, I do not think we should meddle at all. I am quite sure the normal secretions from the uterus and vagina are not infective. The normal lochia is perfectly healthy for at least three days after labor—at least so it is said by competent men who have made careful analyses. If you were to rub the vagina with soap or anything else until you denuded the mucous membrane, of course you would have a field for infection. It is only where there is a real indication, when you know from the unhealthy discharges that the woman will have trouble, that we are justified in these precautions for the prevention not only of puerperal fever, but also for the prevention of the

secretion getting into the child's eyes and producing ophthalmia neonatorum. There are a good many reasons for sterilizing the vagina, but I believe we can only do harm if we make it routine practice to employ antiseptic irrigations prior to or keep them up after delivery. I never employ them after delivery unless I have had a laceration or some ugly discharge or an odor, and I believe the patient is about to become infected. Of course, I make the external genitalia as aseptic as possible with soap and water and with the bichloride solution. I always see that the external genitals are clean prior to and after delivery.

DR. REAMY: Yes; the traumatism that occurs in ordinary cases, the traumatism about the cervix, does not occur until the patient is in the process of delivery; usually it occurs when the head or shoulder is born, and sometimes when the forceps are used. In the healthy state these parts are soon covered over by the fluids from the uterine cavity. The sterilization of the vagina by the antiseptic injections, prior to delivery, has been referred to. If the germs in the vagina are not pathological, they can do no harm. Strong antiseptic solutions thrown into the vagina before or during labor destroy the normal lubricating fluids of the vaginal mucous membrane, which assist in the preparation of the parts for the easy birth of the child. That antiseptic irritation not only prevents the lubrication of the parts and makes it an unnatural case, and to a slight degree retards the labor, but it makes the parts in a better condition to receive germs, so they may enter the lymphatic channels or even get in along the viens. So even with antiseptics you can do damage. It would be far better, if a tear occurs, to introduce a speculum and make the antiseptic application directly to the traumatism itself, just as you would on your hand if you injured it. That would be good surgery.

I would like to have the privilege to go on record in regard to one point. The doctor has spoken about the epidemic in this city. That epidemic of puerperal fever was limited by the Health Officer finally taking efficient measures to stop the attendance of cases

by two of the midwives. The contagion was carried from one case to another by certain midwives and some physicians. As soon as this was stopped the disease subsided. My own sister died in the year 1848, near Zanesville, O., from the infection brought to her by her physician. The epidemic was largely spread in that rural community by two men. Not only one woman, but sixty or seventy cases occurred within a territory of a few miles square. There was scarcely a woman delivered by either of these men but died. In notable instances a woman living several miles remotely, in a neighborhood where no case of the disease existed, but being delivered by one of these physicians the fatal puerperal septicemia followed. Finally, these gentlemen discontinued all obstetric service for three months, their cases being attended by a local physician, not so able as was either of the two named, whereupon not another case occurred. These gentlemen now resumed practice and no further cases occurred. This is all old, but it proves as clearly as any fact can be proven clinically, that the germs producing the disease were specific, and that they were carried to the helpless victim by the accoucheur. It answers much that has been said here to-night. Residing in the midst of the afflicted community as I did at the time, the impressions made upon my youthful mind are lasting. All this occurred in a territory about nine miles northwest of Zanesville, O.

DR. PORTER: I am very glad that this discussion did go outside of the paper, because in the limited time it was impossible to cover all the points. I was disappointed, however, that more time was not given to discussing the means by which sepsis can be avoided in private practice without the expenditure of too much time and energy. The first speaker spoke of suturing the cervix. I have had two cases. In the first case I did it for the purpose he mentioned, to stop hemorrhage. In another case I tried it, but did not get good results; the cervix was thin, as it always is after labor, and the stitches cut out and did not do much good.

I do not think anything can take the

place of ordinary cleanliness. I believe if every case was subjected to careful cleansing there would be very few septic developments. I believe, though, that the next few years will see some very radical changes of opinion as to the antiseptic injections before labor. I myself have never used them, except where I have suspected infection or to prepare for operative procedures. The bacteriologists have shown that the vagina is the habitat of certain pathological organisms, and the reason we do not have trouble is because the secretion of the vagina is acid and has an inhibitory influence on the germs.

DR. STANTON: Why wash it out, then?

DR. PORTER: Well, it is said that for a while after labor the inhibitory power is lost, just when you need it.

DR. STANTON: Would not the inhibitory or destructive power of bichloride of mercury be lost in that time?

DR. PORTER: Its action is, of course, limited to the time when it is used, but there have been a number of cases of even fatal poisoning from the use of bichloride.

DR. MITCHELL: Nearly all the cases of fatal poisoning from bichloride have occurred from washing out the peritoneal cavity.

DR. PORTER: If you have a deep vaginal tear, you have a surface also, which absorbs very readily. The bichloride may also produce a limited gangrene of the torn tissues. You may then have some failure of union in case the tissues are sutured. Those who object to vaginal examinations object to them because there is danger of carrying into the uterine cavity those germs which are normally in the vagina. They insist that the finger should not be carried into the cavity of the uterus when a vaginal examination is made.

In regard to irrigation after delivery, I think that plan is not so popular as it was a few years ago, when the antiseptic craze was at its height, and if the labor is conducted under antiseptic precautions I cannot see the utility of continuing such injections after labor. It would be like opening up a wound,

after it is closed, for the purpose of irrigating it. Of course, the analogy is not complete, for the vagina is not sealed.

Dr. Bonifield suggests that the position I recommend would be objectionable. The position across the bed, with the hips at the edge of the bed, does not necessitate exposure. With stockings and sheets the patient can be entirely protected. With the woman in this position the physician can have better control of the case than in any other way. It seems to me that the liability of infecting the fingers, with fecal matter or otherwise, when the patient lies in the usual position on the bed, is objectionable. If you give some reason, such as to use warm water for the purpose of relaxing the cervix, there is no objection. Being sure my hands are clean and not touching anything until the child is delivered, then I have the child put on a blanket, on the woman's abdomen, and I cut the cord. My usual method is to have the patient's legs out straight and support them over my knees.

DR. BONIFIELD: Does that interfere with her bearing-down efforts?

DR. PORTER: With her thighs supported she can get all the action she needs.

DR. MITCHELL: You recommend that only during the third stage?

DR. PORTER: Yes.

Apostrophe to the Dollar.

An editor has been inspired, after looking over his list of delinquent subscribers, to compose the following: "How dear to our heart is the silver dollar, when some kind subscriber presents it to view; the liberty head without necktie or collar and all the strange things which to us seem so new; the wide spreading eagle, the arrows below it, the stars and the words with the strange things they tell; the coin of our fathers, we're glad that we know it, for some time or other 'twill come in right well; the spread-eagle dollar, the star-spangled dollar, the old silver dollar we all love so well."—*Life and Health*.

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Original Articles.

REPORT OF TWO CASES OF SARCOMA OF BLADDER, WITH SPECIMENS.¹

BY L. J. KROUSE, M.D.,
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CASE I.

Mr. F. M., aged about fifty-two years, an American by birth, merchant by occupation, was sent to me by Dr. Geo. Fackler with the request to make a cystoscopic examination. He complained of constant pain over the pubic region and hematuria. He had been suffering with hematuria for over six years. The urine would be bloody for a time, then clear up, to again become bloody, until now the urine was more or less bloody. The urine was voided every two hours, and contained, besides the blood, some shreds. The quantity passed was about two ounces. Pure blood frequently oozed from the urethra after micturition, more on account of the tenesmus which constantly followed the act. The patient has lost a good deal of weight in the last few months, and looks haggard and worn out from suffering.

A cystoscopic examination of bladder was made, with the result of finding a tumor located on the right side of the internal orifice of the urethra, and extending vertically upwards. The mass, as seen through the cystoscope, was of a greyish-white color, somewhat irregular in outline, attached by a broad pedicle to the bladder wall. It did not extend far into the lumen of the viscus. The shred,

which passed with the urine, was examined microscopically, and was found to be organized tissue, and composed of large round nucleated cells.

Supra-pubic cystotomy was performed, the patient being in the Trendelenburg position. On opening the bladder the tumor was found in the place designated by the cystoscope. It was sessile, greyish in color, somewhat irregular in outline, of firm consistency, and was situated on the right side of the internal orifice of the urethra, extending from the trigonum upwards. Its attached base or pedicle was about one inch and a half in length and about one-fourth of an inch in thickness, and the tumor extended about three-fourths of an inch into the lumen of the viscus. It resembled very much the appearance of a cock's comb. The removal of the new growth was an easy task, as it was torn off with a dressing forceps, its base curetted and then thoroughly cauterized with the thermo-cautery. No packing of the bladder was necessary, as the bleeding from the tumor did not amount to much.

Notwithstanding a large supra-pubic drainage-tube, the patient still complained of tenesmus, at which time he would pass both blood and urine through the urethra. A microscopical examination of the neoplasm showed it to be a large round-celled alveolar sarcoma. The patient left the hospital wearing a supra-pubic drainage-tube. He died a few months later by suicide.

CASE II.

Mr. Wm. H., aged about forty-three years, a merchant, was seen in consultation with Dr. E. W. Mitchell. He had been ailing a long time with some bladder trouble. He complained a great deal of pain in urinating, which act was

¹Read before the Academy of Medicine of Cincinnati, January 31, 1898.

not only frequent, but very painful, the urine being often colored with blood. He said that the bleeding took place at first at long intervals, but lately it was quite frequent.

On cystoscopic examination of the bladder (the viscus was distended with about five ounces of water) an oval, brownish mass, perfectly smooth, about the size of a pigeon-egg, could be plainly seen on the right side of bladder, a little above the internal orifice of the urethra; it seemed to be imbedded in some tissue. This mass I suspected to be a calculus, but on account of its location (not being found on the base of the viscus) I could not state positively that it was a stone. Turning the instrument toward the base of the organ I discerned indistinctly a dark-red irregular mass. Still revolving the instrument so that the light would be shed vertically on the base, the field of the instrument suddenly became black. Nothing could be seen. This obscurity of the image, whenever the base of the viscus was examined, can now be easily explained by the fact that whenever the instrument faced the trigonum its beak entered between the various lobes of the new growth, and thus the rays of the light were obscured.

Supra-pubic cystotomy was performed. The bladder was easily found and opened. The first thing that presented itself was the stone, lying on the right side of the bladder and supported by the tumor. This stone was smooth, of brownish color, oval in shape, weighing 570 grains. The tumor then presented itself, filling up nearly the entire cavity of the bladder. It was very soft in consistence, and was about the size of a child's fist, and consisted of numerous lobes or fringes, which were readily torn off by the index finger. The base or pedicle of the tumor was of firmer consistency. The tumor sprang from the base of the bladder at a point posterior to the trigonum and between the orifices of the ureters. After thoroughly scraping the base of the bladder from which the tumor sprang the parts were cauterized with the thermo-cautery. The new growth proved to be a small round-celled sarcoma. The bladder was

simply drained; no packing was deemed necessary.

The patient began to improve soon after the operation. About the third week the drainage-tube was removed, and the patient began to walk about the room. The pain and tenesmus in the bladder had disappeared. His appetite was better than it had been for years, and he gained considerably in weight. But this did not last long. It was noticed about a week after the removal of the drainage-tube that the pain and tenesmus of the bladder had returned; blood again made its appearance in the urine, so that we had to reintroduce the drainage-tube into the opening, which had not yet closed. Notwithstanding that the viscus was drained, the tenesmus still continued, and there was more or less blood in the urine. About this time there appeared at the site of the operation large exuberant granulations, which bled very profusely. They were of a dark bluish color, and grew to an enormous size, some reaching the size of an English walnut; in fact, these granulations were nothing more than a recurrence of the growth. The curious thing about these new out-growths is that they did not spring from the bladder wall nor from the interior of the viscus, but they sprang from the subcutaneous tissue at the site of the incision of the skin, and only grew from those points.

There are several interesting features connected with these cases, the most interesting of which are:

1. The cause of the tenesmus, notwithstanding a free supra-pubic drainage.
2. Was the secondary growths in the subcutaneous tissue at the site of the operation due to local infection?
3. Is sarcoma infectious?

Of the nearly 2,500 physicians in Paris, five or six make from \$40,000 to \$50,000 a year, ten to fifteen make from \$20,000 to \$30,000, a hundred make from \$3,000 to \$5,000, eight hundred make from \$1,500 to \$3,000, while twelve hundred make less than \$1,500.
—*Med. Age.*

Address.

VALEDICTORY ADDRESS.¹

BY J. AMBROSE JOHNSTON, M.D.,
CINCINNATI.

Once a philosopher reasoned that the world moved to the music of the stars, a music too pure for human ears to hear. It was a happy thought, and happier yet because 'tis true. The world does move to the music of the spheres, a music so pure, so sweet, so true, that it rises as a great glad anthem from the ashes, darkness and noisome gases of this world to guide men on to happiness, and music's name is "Love."

"Love is the only bow on life's dark cloud. Love was the first to dream of immortality. Love is the morning and the evening star. It shines upon the child; it sheds its radiance upon the peaceful tomb. Love is the mother of beauty, the mother of melody, for music is its voice. Love is the builder of every hope, the kindler of every fire on every hearth. Love is the enchanter, the magician that changes worthless things to joy, and makes right royal kings and queens out of common clay. Love is the perfume of that wondrous flower, the heart. Without that divine passion, without that sacred sway, we are less than beasts, and with it earth is heaven and we are gods."

And each human soul [is] but a responsive chord on which this music plays. Happy he whose own heart-throbs are in sweet accord with the anthems of the angels and the stars. Gazing upon the silent minstrels of the sky, who is there but that thinks of his future home, a home of music, a home of love! Instinctively in the heart these three are always as a trinity—music, love and home. And should it not be so? for music is the voice of love and home its dwelling-place.

I speak to those to-night whose duties will be mostly in the home.

Strange as it may seem, still you

will find it true, that the physician of to-day is something like the Great Physician of nineteen centuries since. He healed the sick and cured the halt; but 'twas all to gain the trust of doubting souls. Humanity has not changed and he who heals the body gains the confidence of the heart. You will find that physical ills are not all you will have to treat. You are to be the family adviser and confidant in many trials. You will have the confidence of your people, and let not that trust find an unworthy place in you. Above all things, be true men.

Husbands and wives, parents and children, will tell you what no other ears may ever hear, and, through that confidence, will be placed upon you responsibilities that should make you tremble. In your care will be placed the peace of homes and oftentimes the destiny of souls.

What, then, should the physician be?

Mankind is like a forest. Here rises and spreads the majestic oak, stretching its great arms toward God and Heaven, and there a jungle, where pestilence broods and danger waits. Here one in whose limbs the birds may nest and rear their young; there one that befouls the air and whose touch is death. Some tall and straight, while others cringe and crawl. Good and bad, giants and dwarfs, in one great company they stand.

The true man is he who resolves for right, no matter what the cost may be, and right oftentimes costs much; but the reward is sure. Christ enters the thronged streets of Damascus, a despised Nazarene and outcast; yet after centuries have passed away it is still his name that causes the lip tremble in reverence. Paul stands in his ragged gabardin, before the throne of Gallio, an eccentric disturber and fanatic; yet this day the world's finest shrine shows forth his name over that same imperial city, where the name of Gallio is not so much as heard.

Count over the heroes of this world, and they are men who stood for right, while those for whom they toiled and agonized poured on them contumely and scorn. Yet the despised and per-

¹ Delivered at the Commencement Exercises of the Cincinnati College of Medicine and Surgery, April 13, 1898.

secuted object of yesterday is the saint and exemplar of to-day, and so it will always be.

Then, were I searching for the men whom this world needs most, I would not go where splendor reigns; I would not go to palaces, bright with gold, wrought by the sweat and travail of impoverished men, where each paltry thing speaks of a hungry woman and half-starved child, of riches, ill begot and badly spent; nor would I look to the world's famed warriors, whose names are synonyms for blood and woe; nor to kings, nor tyrants, nor seers. But, like Diogenes of old, I'd search for the honest man—honest in love, honest in thought, honest in deed, honest in all those things that mark the *man*. Such are they who have made all progress, accomplished all right, put love into the human heart, and made humanity humane.

When the great men of this world are counted on that final day there will be strange names upon the roll of honor—names that we have known in rage, names that no one knows, names that are synonyms for folly, names that it were a mockery to wear. The world's standard of greatness has gone for naught, "for the wisdom of this world is foolishness with God."

It does not take great deeds to make great men. To face Goliath on the plain, to brave the seas Æneas braved, to fight the wars Achilles fought, to dare the cannon's brazen mouth, to stand before the bayonet charge, may *mark* but cannot *make* the hero.

All honor to the heroes history brings; praise is no doubt due to those enshrined in Parian marble and to those whose deeds the bards have sung; yet these are but the topmost waves of a storm-tossed sea, that, by position, are seen and heard of men; but there are under currents, stronger than any wave that ever tossed a ship or made Gibraltar tremble. The waves do not make the sea, but the sea furnishes forth the waves. There are heroes unnamed greater than those emblazoned on the centuries.

It was Father Damien who broke the ties of home and love, who made of

himself an unclean outcast to minister to the lepers in the mid-Pacific; but his name is almost lost to man. Yet, when he dared death for mercy's sake, nobler and grander and more god-like was this priest than all the blood-marked heroes history shows. But no proud shaft now marks his resting-place; silent as his own sealed lips is the trumpet of fame. No, heroism is not a name or fame, but duty done.

In these days of science and progress the work we do savors more of dollars than of duty. We speak of the wonders of the inventions of man's mind, of commerce and science, and think what money-makers they are, forgetting that that which adds most to the world's wealth is that which helps all men. Progress in medicine is too often made for the mere sake of name, fame and fortune. Self is the dominant idea and duty to others last.

In spite of all that bright minds have done for our profession, I still admire those good old days when medicine was young—*materia medica* a blister for the outside and Epsom salts for the inside. Simple remedies they had, but with their hearts in their work I tell you "there were giants in those days," when the doctors did battle with grim death, and in other fields the Legion of Honor would have done homage to their deeds.

The doctor of the old school has passed away, but God grant that his spirit may live with us always.

We owe a debt to Ian McClaren for that picture that he paints of Dr. MacLure—a doctor of the old school in Dumstochty. He was "a tall, gaunt, loosely made man, without an ounce of superfluous flesh on his body, his face burned a dark brick color by constant exposure to the weather, red hair and beard turning gray, honest blue eyes that look you ever in the face, huge hands with wrist bones like the shank of a ham, and a voice that hurled salutations across two fields, he suggested the moor rather than the drawing-room." . . . "He was chest doctor, and doctor for every other organ as well; he was accoucheur and surgeon; he was oculist and aurist; he was dentist and chloro-

formist, besides being chemist and druggist." Yet no nobler man ever honored our profession. "When the reapers in harvest time saw a figure whirling past in a cloud of dust, or the family at the foot of Glen Urtach, gathered round the fire on a winter's night, heard the rattle of a horse's hoofs on the road, or the shepherds, out after sheep, traced a black speck moving across the snow to the upper glen, they knew it was the doctor, and without being conscious of it, wished him God speed." Rough he was and uncouth as the moors he traveled, yet "what a clever hand it was in an operation—as delicate as a woman's! and what a kindly voice it was in the humble room where the shepherd's wife was weeping by her man's bedside."

It is hard to tell to aching hearts that death is near, that some one who is loved and cherished beyond all earthly hopes is soon to pass to that great unknown. When the angel of death draws near and the shadows begin to fall, it is the doctor with sympathetic heart who may lighten the burden of that hour. MacLure knew how, and when he told Thomas he must lose his wife, it was with his great heart melting with pity that he said what might assuage the sorrow of the parting: "Thomas, my poor fellow, if it could avail, I tell you I would lay down this old worn-out ruckle of a body of mine just to see you both sitting at the fire side and the children round you, happy and content again; but it's not to be, Thomas, it's not to be." "When I looked at the doctor's face," said Margaret Howe, "I thought him the winsomest man I ever saw. He was transfigured that night, for I'm judging there's no transfiguration like love."

Yes, that was it. "Love" made Dr. MacLure and others of that old school honored and loved of men. The potency of that power has not passed away, and the doctor of to-day may hold the love his predecessors held.

And now, as you stand at the threshold of your chosen work, let not the praise of men or greed for gold be a measure of your usefulness. If you follow medicine for the "loaves and

fishes," you are unworthy of the trust. Ofttimes in this journey you may guide some wanderer from the Slough of Despond to the Delectable Mountains, may bring a smile of gratitude and hope to some lip that is drawn with pain and care, and if that be all your fee, thank God it was not a curse. Do not measure success by your bank account, but by the good you do. Be true to your work, true to yourself, true to all men—be heroes.

"Think not that helm and harness are signs of valor true,
Peace hath higher tests of manhood than battles ever knew."

To choose your duty before yourself, to guard the sanctity of home, to find your heaven in others' peace, will make you heroes, every one, and strike sweet music in this world in concord with the singing stars.

Sciatica Treated by Compression Over Painful Area.

Negro, of Turin, has succeeded in curing 100 out of 113 cases of sciatica by digital pressure over the painful part (*Berlin. klin. Woch.*). His method is as follows: The patient assumes ventro-decubitus with extremities well extended and adducted. This secures relaxation of the muscles around the canal from which the sciatic nerve emerges and facilitates locating exactly the seat of the pain. On the painful spot the end phalanx of the right thumb is superimposed, and aided by that of left thumb is pressed firmly and with all possible force for fifteen or twenty seconds, and pressure is repeated for some length of time after an interval of a few minutes. The patient is then usually able to walk, and at times is free from pain. The entire procedure is repeated in two days. In the majority of cases six treatments are sufficient.—*Indian Lancet*.

ONE grain of the bichromate of potassium dissolved in four ounces of water, a teaspoonful every two or three hours, will be found to give relief in loss of voice, hoarseness and in bronchial coughs.—*Med. Summary*.

Translations.

PARISIAN MEDICAL CHITCHAT.

BY T. C. M.

The Most Active Promoter of Bald Heads—Doctors Who Amuse Themselves—Medical Night-Owls—How Some Authors Write—Fly-Blisters and the French Academy—Francis II and Henri III Viewed Through Medical Spectacles—The Amount of Lead it Requires to Kill One Soldier.

An active promoter of bald heads is the employment in common of brushes and combs. In the most frequented hotels, and in barber shops, and on sleeping-cars you will see the same combs and brushes used on hundreds of different heads. Bald heads are for the most part the result of this promiscuity.

Doctors who amuse themselves are common in Paris. Some have temperaments of steel, too. Closing their offices at 7 o'clock, dining at 7:30, to the theatre at 8:30, to the club at 11:30 P.M. "It is 4:30; I know where to find him," says one of his clients; "he is at his club, playing cards. He is never at home before 5 o'clock in the morning, and is up and at the hospital by 8 o'clock A.M. again." These are the doctors who are admired by the Parisian public, because they recommend their patients to stay up all night. "Go anywhere but to bed at night," is the advice of these medical night-owls. "Is it not natural to go to bed only for a good night's rest?" queries a patient. "Even the chickens go to roost early." The doctor retorts: "Well, chickens never live longer than three years. If you want to live like a chicken go to roost at sundown!" How these night-owls attend to business and stand the wear and tear of society, too, is one of the mysteries.

From the habits of some doctors to the habits of some literary men is but a short step. The habits of many authors have been regarded rather as manias,

justified, in reality, by a need of stimulation for the brain. In order to make the blood circulate in their heads writers have given out to the world some very original methods. The great Descartes remained in bed, motionless, while Cujas could only work lying flat on his belly on top of a rug. Some prevent the head from becoming cool. Sardou, when he composes a play, keeps on his black velvet skull-cap under all circumstances. For the same reason Milton always wore an old woollen mantle when he was composing "Paradise Lost." In order to make an afflux of blood to his head, Schiller used to cool his feet on ice. Chateaubriand, when he dictated his works to his secretary, always walked over ice-cold floors in his bare feet while composing. These are mechanical processes and agreeable to the anemic. The robust author prefers to excite his circulation by strong muscular exercises.

Some practice physical exercise. Harencourt, before using his pen, practices with boxing gloves and pulleys. Richepau contents himself with weights and pulleys, in addition to the trapeze.

A common and more easy exercise is to compose while walking. Mistral, the celebrated Provencal poet, writes while promenading.

Victor Hugo, in his fever of composition, walked about. He stood erect and dropped the leaves of his manuscript on the floor as they were finished, so that the MSS. were around his feet in heaps.

Many modern authors affect walking while at composition. Catulla Mendes takes long promenades, and returning to his home dots down his ideas. Jean Lombard, who died just a few years since, was a great walker when composing.

Walking may become a necessity. Ampere could not clearly explain anything he knew if the movements of his body did not assist him. His brilliant and eminent faculties were extinguished when he sat down in his chair. "To sit down at a table with a pen in hand," he remarked, "is the most painful and rude of occupations."

Nervous excitation may be produced

otherwise than by sanguinary afflux. All excitations of our senses are reflected from afar to the brain. The nervous cellules vibrate in unison, and the excitation is propagated. This explains why so many authors can only compose in the midst of loud noises and strong light.

It is odd to see literary men who can only write in the tumult of noisy *cafés*; this was the case with Pouchon, Verlaine and numerous others. The great Cimarosa found the most beautiful *motifs* for his operas only in the midst of noise. Saint Saens has also declared that his musical *verve* was best excited by being in a crowd. A well-known Paris professor can only give his lessons when in an infernal din. When his students wish to punish him they keep absolutely quiet. Under such a condition he is completely incapacitated for lecturing. Some authors, when they cannot bear a crowd, have animals about them. Many authors can only compose with dogs or cats about them. Theophile Gautier, Baudelaire, Francois Coppee and Leaceini would never write unless their pet cats were about them. Gautier owned about fifteen of such pets. Leon Cladel composes in wooden shoes, walking in a hay loft with his pet dogs.

We can well understand certain apparent contradictions; some love a noise to excite them, others fly from a noise. The first mentioned pay no attention to noises that excite the second and destroy ideas. The first named do not really need the noises, either. Some of the later authors, like Esbarbes, well express the desire for quiet. "I cannot write," says he, "unless I am in the country, with many leagues of silence about me."

There are many illustrious examples of the latter kind. Montaigne, when he had an inspiration, ran out of his house and hid himself in the solitude of an old tower, that no one ever visited.

Jean Jacques Rousseau meditated in the fields in the full glare of the sunlight while botanizing. To keep outside noises away he often plunged his head into a haymow and stuffed up his ears with cotton.

Intense light excites some authors. Balzac and Alfred de Musset could only work in the midst of a number of lighted candles. The great Zola now does the same thing nearly every Sunday.

All these habits, regarded by many as manias, are justified by the necessity, when the literary man needs something to excite or quiet his brain.

The French Academy has lately been discussing the subject of Spanish fly-blisters. These blisters were first introduced by Asclepiades some two thousand years ago, and have come down to medicine from the Dark Ages. In 1674 Sydenham extolled them in fevers. In the sixteenth century Van Helmont, in the seventh century Baglivi and Van Swieten, fought against blisters. In these later times Bouilland, Velpeau and Ridoux employed them to excess, while the late Prof. Peter was the champion of the blister. During the present century, Chomel, Louis, Rostan, Rilliet, Barthes and Trousseau have approved the use of vesicatories.

Setons, moxa and permanent issues disappeared from use about 1850. Up to that time they were thought to be sovereign remedies. Blistering persists to the present day, and even now Robin and Ferrand are again striving to bring back the common fly blister to popular use. "Blisters," says Robin, "exalt leucocytosis and thus favorize the struggle of the organism against microbes." It is also added that "it increases respiratory changes. In pneumonia blisters increase the consumption of oxygen from 58 to 100. This comes from the reflex cutaneous affection or from the absorption of the cantharidine. It is easy to avoid nephritis and suppurating skin," Ferrand. Altogether this blister discussion is growing interesting.

Dr. Potiquet, a distinguished French laryngologist, has lately given the medical world a learned study, on the death of Francis II ("La Maladie et la mort de Francois II," Paris). Dr. Potiquet has diagnosed the King's malady as an adenoid growth. Francis II had a flat nose and a constantly opened mouth. His voice was nasal. He had difficulty

in clearing mucus from his mouth and nose. He was hard of hearing, and had a stinking breath; his face was full of large pimples. He was very lazy and low spirited. His life was wretched and full of complaints. His physiognomy, as noted in the medals of his time, was very infantile. Puberty came to him very late, although he married Marie Stuart when he was only fifteen years and three months of age, and for a long time after only remained a platonic lover. He died of a suppurating inflammation of the ear, a common complication among adenoidians. Poor little King! He was incapable of managing his realm. In our day his vegetations would have been taken out and affairs of State might have been managed differently.

* * *

The Marshal of Saxony once said that to kill a man in battle it was necessary to expend as much metal as one human body would weigh. During the war of 1870 it required an average expenditure of 1,300 bullets to kill one soldier. Garrendi, who has treated this question as a mathematical one, finds that the weight of lead expended in a battle was always much greater than that of the weight of the men slain. According to Chesnal, there was fired from the Austrian side at the battle of Solferino 8,400,000 shots, and there were only 2,000 men killed and 16,000 wounded in the Franco-Sardinian army. Each wounded soldier then caused the expenditure of 708 shots, and each dead one 4,200 balls. During the Franco-Prussian war the cartridges fired by the Germans numbered 30,000,000, and the discharges from cannons were 362,000. Yet the whole number killed and wounded on the French side was only 35,000 thousand, showing the Prussian to be about the poorest gun shooters in Europe.

ONE drop of croton oil dissolved in thirty drops of chloroform and one ounce of glycerine, given at night, on an empty stomach, followed in the morning by sufficient castor oil to purge well, will remove tape-worm.—*Med. Summary.*

THE Cincinnati Lancet-Clinic.


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DR. J. C. CULBERTSON,
317 W. SEVENTH ST. CINCINNATI, O.

CINCINNATI, APRIL 30, 1898.

Editorial.

NUCLEIN IN MALARIA.

The earnest student of medicine is continuously surprised at the number of topics, thought settled for all time, which spring up with almost every step of progress. Especially is this true of the malarial fevers. The vast and delightful vista of study for microscopists opened up by the discoveries of Laveran, Marchiafava, Osler, Hewetson and others succeeded largely in ruling out many disorders formerly classified as of paludal origin. One could no longer be justified in assigning anomalous symptoms and disorders to that immense class vaguely termed "a touch of the malaria." With our more accurate means of diagnosis came corresponding strides in therapeutics, as has always been the case, especially during the last century, with pathological progress. Those poor unfortunates who have successfully resisted many physicians and methods of treatment are no longer saturated with cinchona and its derivatives.

Interesting observations have been

made as to the behavior of this disease during the instigation of treatment, observations the result of which brought forth the initial sentence of this article. So many cases responded so readily and quickly to quinine, so beneficent and lasting were the effects obtained by this drug, that the dictum, corroborated by the highest authority, was spread broadcast, "that a fever not responding to quinine was not malarial." It appeared as though "the final word" had been spoken, so meekly was this law accepted by the profession. But again it was only the ominous silence that often precedes the storm. Fortunately for science, there are always in every branch those sturdy thinkers who accept nothing but what they themselves have personally proven. Shortly there arose a small cloud in the clear sky of malarial diseases, which has been gradually assuming such large proportions that the storm it foretells will inevitably cause material change in our ideas of this peculiar disease.

The first observations of ague in this country, and those upon which the law above referred to is based, were made mainly by Northern men, or, in other words, in a latitude where the most bizarre phases of the disease are rarely seen — those of the estivo-autumnal parasite. As regards the tertian and quartan forms of the plasmodium, continual study but adds proof to the dictum of Osler, "that any fever that resists the action of quinine is not malarial." Osler's researches and those of his associates were mainly made on the study of the two latter types; in those cases of the estivo-autumnal variety which did come to their notice, it must not be forgotten that the very change of climate which their patients enjoyed may in large measure have contributed to the good results reported. However

that may have been, the fact remains that many cases, estivo-autumnal in type, especially those in the more southern latitudes, cases in which the diagnosis has been absolutely proven by the presence of crescents and ovoids in the blood, have not been benefited by quinine or its derivatives, administered in small or large doses, in solid or liquid form, by mouth, rectum or hypodermically, though it must be confessed that the best results in persistent cases have been obtained by the latter method of administration. Reports of such cases have appeared so frequently in medical literature that their significance can no longer be ignored. The most recent article on the subject appeared in the *Medical Record* of February 7 in a masterly article by Beverly Robinson. The practical result of all this is that necessarily more or less marked changes in therapeutics appear, for the active physician cannot await the decision of scientific discussion when his patients are clamoring for relief from their symptoms. Accordingly as quinine seemed unable to perform the allotted task, other drugs were tried with more or less indifferent results.

It is the usual fate with every new preparation that appears that there are always some enthusiasts, who, carried away by partial or few successes, laud their favorite of the hour to the skies. They rush rapidly and eagerly into print, anxious to put themselves on record among the first. Unfortunately, on the inevitable failures that follow fair and impartial trials of so many of our preparations, they are silent, not wishing to refute their former lavish praises even for the advance of medical science. It is no wonder that careful and conservative men are chary about using new drugs. The stamp of universal approval and of age is necessary to such a plea

for recognition. Adherents there have been and yet are to methyl blue, arsenic, iron, strychnia arseniate. Among later remedies, nuclein is receiving very favorable comment. This substance is extracted from animal membranes, the spleen, testes, the thyroid, or perhaps more readily obtained from yeast after the method of Vaughan. It may be administered hypodermically or in tablet form, each tablet corresponding to one drop of nuclein.

The germicidal action of the blood has been known for a considerable time. Further experimentation proved that this germicidal action was due to a substance, given the name of nuclein, which was furnished by the polymorphonuclear neutrophiles. Now in chronic wasting diseases, such as tuberculosis and chronic malaria, the blood, of course, deteriorates with the other body tissues. The function of the neutrophiles being thus impaired, less resistance is offered to invasion by micro-organisms. Remember the predisposing cause insisted upon in all infections—lessened physiological resistance from whatever cause. Theoretically, in our treatment, if we can bring the resistance of the blood to invasion to par, either by stimulating the neutrophiles to increased activity or by supplying artificially the substance needed to bring about a physiological resistance, an improvement or cure should result. As a theory all this sounds very plausible; practical trial by Wilson and others contribute instances of perfect cure in cases of undoubted malaria, which had proved intractable to quinine in large doses. Small doses of nuclein (one drop every two or three hours) caused a prompt disappearance of the cachexia, migraine, gastro-intestinal disturbances, hematuria, general depression, and other so-called malarial symptoms under

which the patients were suffering. In view of the resistance of a certain percentage of cases of malaria to cinchona treatment, such reports are, to say the least, interesting, and demand a fair trial for the remedy to prove its efficacy.

M. A. B.

HEALTH DEPARTMENT.

The annual report of the Department of Health has been issued during the past week, and will be supplied to every physician making application for it. As a matter of fact, all interested in the health of our city should read the report, not only to see what vigorous efforts have been made for improvement, but also to what extent, though often under adverse circumstances, these efforts have been crowned with success. Though Cincinnati is yet three or four years behind the times from the standpoint of rigid health regulations, taking New York as a standard, we have reason to be greatly encouraged.

Though the public generally and many physicians, through the local newspapers, affected to laugh at the efforts made to exclude yellow fever during the epidemic of last September, the fact remains that the development of the disease would have been a great loss to the city from a pecuniary point of view. Rigid inspection of railroads and boats succeeded in capturing one genuine case, which was promptly isolated at the branch. Further comment is unnecessary.

The law enacted by the State Legislature in 1894 requiring an immediate report by midwives of all cases of specific inflammation of the eyes in newborn infants is now being rigidly enforced. This law had been practically a dead letter since its passage, and the author has himself seen a number of cases of irremediable blindness in the

past few years due, in part at least, to the criminal negligence of the attending midwife. A strong adherence to this rule by the department will undoubtedly be followed by gratifying results, and will be commended by all.

We have not the space to speak of all the improvements made during the *régime* of the present department. It were better, perhaps, to call attention to one movement in the right direction, which, owing to a lack of monetary support, has not as yet succeeded. We refer to medical school inspection. This plan was outlined several months ago by the Health Officer at the Academy of Medicine. Statistics show that the number of cases of diphtheria and measles especially, and to a less extent the other acute infections of childhood, are far less prevalent during the vacation months than at other times of the year. Experience elsewhere has shown, too, that under inspection, with an immediate isolation of all suspects, the number of cases during school months has decreased to about the number during vacation. In a city the size of Cincinnati this would mean a lessening of mortality by two to three hundred a year. Surely the small amount of money necessary to secure this end could be spent in no better way. The department annual explains this plan in detail, and should be read and endorsed by every physician. There is one point in the report of the registrar, however, which might not so readily meet approval, especially among surgeons: "Violence. — Deaths from violence amounted to 286, of which 204 were accidental, 10 homicides, 69 suicides, and 3 *surgical operations*." We wonder what——.

M. A. B.

THE Michigan State Medical Society holds its third annual meeting in Detroit, May 5 and 6.

A PRACTICAL QUESTION.

Two men began the practice of medicine under very similar conditions, and with equal culture and ability. Twenty years later both became prominent, but one was grasping, tricky and almost dishonest in his business relations. His sense of what was honorable in his relations to others in the profession was feeble, and open to much criticism. The other was just the opposite, and was above all question of suspicion, and was trusted in every relation of life. Both were really strong, proud men, who aspired to lead in every question of honor and justice.

The father of the first man was a tradesman whose life thought was small gains by adroit dealing with others. His son formed his conceptions of business ethics from his father's standard. His medical training had ignored all question of ethics, and he entered the profession with his father's views of getting on in the world. Of course, by contact he had learned some things, but still the old tradesman's ideas of taking pecuniary advantage of every opportunity was fixed in his mind. While he seemed to be prosperous, in some way he was treated with suspicion, and business men took advantage of him, and finally he died under a cloud, and his memory was shadowy.

The other man was a farmer's son, whose views of life were broader and his conceptions of duty and ethics were on a higher plane. He was the idol of a large circle of friends, and died after a long service of honorable living.

If the first man had been taught *ethics* in his college course, and the questions of honorable dealing, with duty to others, he would have avoided the stumbling blocks of all his after life. But he was ignorant and remained so,

never realizing the relations which he owed to others. The other man had a clearer conception of this, and learned by observation and experience, but had he been taught these higher topics he would have been a stronger man.

This question is suggested: Are not our colleges to blame for the low standards of honor and duty displayed in after life by its students? Would not this be changed if a few clear, practical lectures on ethics were given as a part of the regular training for medicine? If the professors and teachers would not only teach high ethical truths and put them in practice in their conduct, perhaps less of the low scrambling would be manifest in the profession.

T. D. C.

EDITORIAL NOTES.

OHIO STATE MEDICAL SOCIETY.—Following is the programme of the fifty-third annual meeting, to be held in Columbus, May 4, 5 and 6, 1898.

WEDNESDAY AFTERNOON.

Call to order at 1 P.M.
Prayer.
Address of welcome.
Response. President Humiston.
Reports of standing committees.
Reports of special committees.
Appointment of Committee on Nomination.
Tubercular Peritonitis. C. M. Lenhart, M.D., Zanesville.
Partial Cataract. C. F. Clark, M.D., Columbus.
Some Medical Aspects of Capital Punishment. F. O. Marsh, M.D., Cincinnati.
Functional Heart Murmurs. C. F. Hoover, M.D., Cleveland.
Psychic Treatment of Disease. Philip Zenner, M.D., Cincinnati.
Intestinal Obstruction; Operation; Recovery. Sherman Leach, M.D., Mt. Sterling.
Syphilis of the Upper Air Passages. Howard Straight, M.D., Cleveland.
Movable Kidney. Yeatman Wardlow, M.D., Columbus.
Monstrosities vs. Maternal Impressions. George S. Courtwright, M.D., Lithopolis.
Irrigation with Salt Solution and Other Fluids in Surgical Practice. Hunter Robb, Cleveland.

WEDNESDAY EVENING.

Reception to members and visiting ladies, Great Southern Hotel.

THURSDAY MORNING.

Call to order, 9 A.M.
Studies in the Morbid Anatomy of Epilepsy. A. P. Olmacher, M.D., Gallipolis.
Operations on the Kidney. Dudley P. Allen, Cleveland.
Arterio-Sclerosis. Joseph Eichberg, M.D., Cincinnati.
Sarcoma of the Thigh; Operation, with Results. E. W. Walker, M.D., Cincinnati.
Uric Acid. D. N. Kinsman, M.D., Columbus.
Lumbar Punctures. R. J. Wenner, M.D., Cleveland.
Removal of the Cecum for Malignant Disease. J. C. Oliver, M.D., Cincinnati.
Henrotin's Method in Pelvic Abscess. J. C. Reeve, Jr., M.D., Dayton.
The Alcoholic Forms of Insanity. E. G. Carpenter, M.D., Cleveland.
Sequences of Abnormal Refraction. D. R. Silver, M.D., Sidney.

THURSDAY AFTERNOON.

Executive Session.

Reports of committees, 1:30 P.M.
Election of officers.
Selection of place of meeting.
Election of delegates.
Annual Address. William H. Humiston, M.D., President.
The Incision Less Than One and a Half Inches in Appendicitis. N. Stone Scott, M.D., Cleveland.
Surgery of the Pneumatic Sinuses of the Skull. Robert Sattler, M.D., Cincinnati.
Digitalis and the Heart. G. M. Waters, M.D., Columbus.
The Obacure Cases of Gall-Bladder Disease. E. S. Stevens, M.D., Lebanon.
Address in Surgery: Intestinal Tuberculosis. Nicholas Senn, M.D., Chicago, Ill.

THURSDAY EVENING.

Call to order at 7:30 P.M.
Address in Medicine. H. A. Hare, M.D., Philadelphia, Pa.
Annual Banquet, Great Southern Hotel.

FRIDAY MORNING.

(May be divided into sections.)

Call to order, 9 A.M.
Is the Use of the Rectal Sound Scientific? Thomas Charles Martin, M.D., Cleveland.
The Technique of Minor Cosmetic Surgery. L. A. Yocum, M.D., Wooster.
Ectopic Gestation; What Cases to Operate Upon. J. Ambrose Johnston, M.D., Cincinnati.
Clinical Applications of Experimental Evidence of a Research Into Collapse and Shock. G. W. Crile, M.D., Cleveland.
A Paper. W. A. Dixon, Ripley.
A Paper. W. J. Means, M.D., Columbus.

Ovariectomy During Pregnancy. John E. Sylvester, M.D., Wellston.

Bilateral Paralysis of the Posterior Crico-Arytenoid Muscles of the Larynx, with Report of a Case, A. R. Baker, M.D., Cleveland.

Surgical Treatment of Tuberculosis of Bone. Frank Warner, M.D., Columbus.

Sarcoma of the Choroid, with Cases. B. L. Millikin, M.D., Cleveland.

Gastrostomy for Stricture of Esophagus, and Report of Case. E. M. Gilliam, M.D., Columbus.

A Case of Cirrhosis of the Liver. P. J. Kline, M.D., Portsmouth.

The Clinical Importance of the Position of the Stomach. Henry W. Bettmann, M.D., Cincinnati.

Two Interesting Breast Cases. Albert H. Freiberg, M.D., Cincinnati.

Head Nodding and Head Rotation Usually Associated with Nystagmus in Very Young Children, with Report of Two Cases. Chas. J. Aldrich, M.D., Cleveland.

Methods of Dealing with the Stump of the Appendix. C. N. Smith, Toledo.

Intra-Cranial Complications of Aural Disease; Prognosis and Treatment. Andrew Timberman, M.D., Columbus.

To secure the rate of one and one-third fare for the round trip, get a certificate from the ticket agent when the ticket is purchased for Columbus. This certificate, when endorsed by the secretary of the society and the Special Agent of the Central Traffic Association, entitles the holder to a return ticket for one-third the regular fare.

Tickets should not be purchased more than three days prior to the meeting, and are good for three days after the meeting.

Special agents will be in attendance Thursday. Certificates must be signed on Thursday. Deliver certificates to assistant-secretary when you register.

REPORT OF THE HEALTH DEPARTMENT OF CINCINNATI.—Following is the statement of infectious and contagious diseases for week ending April 22, 1898:

	Cases.	Deaths.
Measles.....	17	..
Diphtheria.....	2	1
Scarlet Fever.....	5	..
Typhoid Fever.....	5	..
Phthisis Pulmonalis.....	8	14
Membranous Croup.....	3	..
Pertussis.....	13	3
Varicella.....	2	..
Total.....	55	18

The mortality report for the week ending April 22, 1898, is as follows:

Diphtheria	1
Whooping-Cough.....	3
Other Zymotic Diseases.....	5—9

Cancer..... 2

Phthisis Pulmonalis..... 14

Other Constitutional Diseases.... 9—25

Apoplexy..... 1

Bright's Disease..... 3

Bronchitis..... 7

Convulsions..... 2

Heart Disease..... 13

Meningitis..... 6

Nephritis..... 5

Peritonitis..... 2

Pneumonia..... 27

Other Local Diseases..... 14—80

Deaths from Developmental Diseases.. 9

Deaths from Violence..... 3

Deaths from all causes..... 126

Annual rate per 1,000..... 16.17

Deaths under 1 year..... 26

Deaths from 1 to 5 years..... 16—42

Deaths during preceding week..... 123

Deaths corresponding week 1897..... 126

Deaths corresponding week 1896..... 131

Deaths corresponding week 1895..... 137

THE Medical College of Ohio will hold its Commencement Exercises on Tuesday, May 3, at the Odeon. The Alumni meeting will occur at the College Building at 2 P.M. of the same day.

ACADEMY OF MEDICINE.—Monday evening, May 2: "Icterus Neonatorum," Dr. Jas. W. Rowe.

How People Sleep.

In England the old four-poster bedstead is still the pride of the nation, but the iron or brass bedstead is beating it out of the field. The English beds are the largest beds of the world. A peculiarity of the German is its shortness; besides that, it consists frequently in part of a large down pillow or upper mattress which spreads over the person and usually answers the purpose of all the other ordinary bed clothing combined. In the tropics men sleep in hammocks or upon mats or grass. The East Indian unrolls his light, portable charpoy or mattress, which in the morning is again rolled together and carried away by him. The Japanese lie upon matting, with a stiff, uncomfortable wooden neck-rest. The Chinese use low bedsteads, often elaborately carved, and supporting only mats or coverlids. The ancient Greeks and Romans had

their beds supported on frames, but not flat like ours. The Egyptians had a couch of a peculiar shape, more like an old-fashioned easy chair, with hollow back and seat.—*Indian Lancet.*

Children's Appetites.

To promote children's appetites there is no better plan than to give them plenty of outdoor exercise, fun and frolic; make them regular in their habits, and diet only upon plain, nourishing food, and they will seldom, if ever, complain of a lack of appetite. Never, however, keep them overtasked in school, or confine them closely to the house after school hours and frown down any attempt at play. If children are fed upon rich or highly-seasoned foods, nuts, etc., or are allowed to eat between meals, it is hopeless to expect them to have an appetite for their proper meals. Don't allow them to study too much, and especially keep them from reading the "penny dreadful." Sickness is the most expensive nuisance in the word, and although there may be cases when it makes people or children better, it generally makes them selfish, sad, and misanthropical, mean, and miserable. The best way to make children happy and good is to keep them well.—*Indian Lancet.*

BACK NUMBERS.—Carron oil, iodoform and picric acid are back numbers in the treatment of burns. Carron oil possesses no antiseptic qualities whatever, while iodoform, owing to its strong toxic effects and odor, is very objectionable to the patient, and in some cases dangerous to use.

In regard to treating burns with picric acid, its disadvantages are staining of the hands and bed clothes, and its utter uselessness in allaying the inflammation or assisting in granulation. Then again: Walther, in the *Gazette Hebdom. de Medecine et de Chirurgie*, reports a case of two children he treated for burns with compresses of picric acid, in which there was pain, severe smarting and vomiting. A second application was made with same result, and this mode of dressing had to be discontinued.

In Unguentine we have a thoroughly antiseptic, healing and restorative dressing, non-toxic, inodorous and clean. It readily subdues inflammation, and assists in granulation and was used in the hospital barracks at Key West, Florida, where the wounded soldiers of the Maine were sent for treatment from Havana.

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of March 28, 1898.

The President, LOUIS SCHWAB, M.D., in the Chair.

W. H. CRANE, M.D., Secretary.

[TELEPHONE NO. 1981.]

Obstruction of the Common Duct of the Gall-Bladder.

DR. EDWIN RICKETTS: This patient is a farmer, twenty-six years of age, the patient of Dr. Hill, of Vanceburg, Ky. The patient enjoyed excellent health until last November, when a periodical obstruction of the common duct of the gall-bladder was observed. He never had any acute attacks of pain, similar to that of a patient suffering from gall-stone, but there was that peculiar, dull, heavy pain in the region of the gall-bladder that incapacitated him from work. The usual remedies were given him without benefit, and he came into the hospital on the eleventh of this month. Upon examination I was satisfied that he had an obstruction of the common duct, which was not continuous. We did not operate for gall-stones. The gall-bladder was bent upon itself, so that the common duct was pretty well closed up and adhesions had to be freed in order to pull the gall-bladder up into the position it should occupy. Upon incising the gall-bladder, perhaps two or three drachms of biliary matter were removed; this material was the darkest I have ever seen. The gall-bladder was drawn up and stitched to the abdominal wall and left to itself. At 10 o'clock of the next morning the bowels began to move freely, and the characteristic discharges were present and have remained so. This patient has not suffered a particle of pain; he has not taken any morphine, and we will send him home to-morrow. I only present the case to show that we may

have cases demanding operation although no gall-stones are present. In the last ten days this patient has been gaining in flesh. There was never marked jaundice.

DR. KRAMER: What was the character of the gritty substance? Was it minute gall-stones?

DR. RICKETTS: Yes.

Torpidity of the Bowels.

DR. S. C. AYRES: I met a case of torpidity of the bowels last week, which to me was rather surprising, in the person of a woman about fifty-four years of age. After the operation, which I performed on her eye, I asked her about her bowels, and she said they had not moved for six days. I expressed some surprise. "But," she said, "I often go eight or ten days without an operation, and sometimes two or three weeks, and I have gone four weeks." It seems to me if there is anything in auto-intoxication, the woman ought to be dead by this time, since the thing has been going on for a number of years. I would like to ask if any of the gentlemen have made similar observations.

DR. CALDWELL: The condition referred to by Dr. Ayres does not appear to me so very unusual. I know there is an adage among sailors that they close up their hatches when they close the hatches of the ship, and open them up again when they open up in port. I have a case of an old German lady, who told me she never felt well when her bowels moved more than once in three weeks, and when in that condition she always felt well, and when they moved she always felt sick. I did not wonder at it. The old lady is seventy years of age. On one occasion, having given her a rather strong cathartic medicine, I was somewhat appalled at the results; since that time she has not been willing to again undergo such an operation.

DR. DRURY: I do not think that is altogether unique. I know one patient who is not accustomed to having the bowels move more than once a week, and another who often goes three or four weeks, and never under any circumstances expects her bowels to move oftener than once in three weeks. We

all remember the case of Graham, who said the patient thought she had a diarrhea if the bowels moved oftener than once in two or three weeks. One of my patients was not over twenty years old, and the other was a woman of middle age.

DR. LANDIS: When I was in the City Hospital there was a lady admitted who said her bowels only moved once a month, and that was when she menstruated.

DR. WM. JUDKINS: It is rather remarkable, I think, the ages at which some of these cases are reported to occur, as young as twenty years of age. I thought Dr. Ayres' case at fifty-two years was rather remarkable. I have seen the condition in old men and women at the Old People's Home, on Walnut Hills. In one instance I was called out, thinking one of the patients had a diarrhea because there were two operations in one week.

DR. MCKEE: I have a patient who, for thirty-two years, has had her bowels move regularly three times a day. I would like to hear from this side of the question.

DR. SCHWAB: I only wish to state that when I had charge of the City Infirmary it was not at all unusual to find old women who could not remember when they had had a stool last. That was probably because of defective memory, but there were those who would not have a stool for a month, sometimes for two months, and then when the operation would take place the mass would have to be removed. That occurs in the Infirmary right along, largely due to their diet and lack of exercise, yet those patients seem to be perfectly well.

Tests for the Blood and Urine in Diabetes.

DR. G. A. MALSBARY: Since Dr. Bremer, of St. Louis, demonstrated before this body the testing of the blood and urine in diabetes by means of the aniline dyes, I have been using these methods of diagnosis in all cases resembling diabetes that have come under my observation. As a result of the use of these tests in practice I have come

more and more to place reliance upon his urine tests. Dr. Bremer stated that only some three days previous to the time of his demonstration in this city he discovered a difference in the reaction of the urine to certain aniline dyes, namely, ethylene blue and methyl violet. Of these dyes about gr. $\frac{1}{30}$ – $\frac{1}{40}$ is added to 10 c.c. of urine. It is better to use a control-tube of normal urine. Bremer cautions us to be sure that the specific gravity of the urine to be tested is not less than 1015, and that the temperature of the urine is 14–15° Celsius. It is also necessary that the test-tubes contain no water and that the dye be fresh, or at least in good condition. With these precautions it will be found that the diabetic urine is colored blue by ethylene blue, whereas the control specimen of normal urine will be colored green. When methyl violet is used the diabetic urine will be colored violet, whereas the control-specimen will not dissolve the dye and remains uncolored.

The reaction does not seem to depend upon the presence of grape-sugar in the urine, since methyl violet is not dissolved by normal urine to which a large amount of grape-sugar has been added (Specimen No. 1). However, should the grape-sugar be in the form of the ordinary liquid glucose (Specimen No. 2), there will be a reaction, since this substance contains a certain amount of water, and, falling to the bottom of the tube, comes in contact with the dye and dissolves it, imparting a violet color to the urine. The same reaction is noticed when there is any water in the test-tube, since the dye is readily soluble in water. But with dry grape-sugar no reaction is obtained.

Of further interest is Specimen No. 3, from a diabetic patient. This patient had shown large quantities of sugar in the urine, but at the time of this examination, the patient having been upon a proper diet, the sugar has largely or altogether disappeared from the urine, so that the Nylander test is entirely negative (Specimen No. 4). But the Bremer test with methyl violet is positive, indicating that the patient still has diabetes, notwithstanding the apparent

disappearance of sugar. It will be observed that the control-specimen (No. 5) is not colored.

Formalin.

DR. B. M. RICKETTS: I merely arise to speak of a matter, which may be of interest to us all, in reference to the use of formalin. I have some cases in the hospital in which I have used formalin. There is one case of sarcoma of the groin, where we had pus. Ten days ago we used a 2 per cent. solution of formalin in the cavity, packed it with gauze, and there has been since then no pus. I have now used formalin in three cavities with the same result. It is a rather unique result, so far as I am concerned. The strength of the solution used was from 1 to 5 per cent. It hardens the tissue, and the tissue that comes in contact with the solution will roll up and you can lift it out. In a case of erysipelas, which involved quite an extensive amount of tissue, I used a 5 per cent. solution of formalin, saturated cloths with it and spread over the affected areas, and the erysipelas disappeared. That is the first case of erysipelas in which I have tried formalin, and I do not know whether it would be a universal result.

DR. MAGNUS TATE: Have you ever used it in the abdominal cavity.

DR. RICKETTS: No, sir. Within twenty-four hours the erysipelas subsided, although it had extended over almost the entire body. Some skins will bear formalin better than others; some will stand a 5 per cent. solution and some will not.

DR. W. B. WEAVER: I have not had much experience with formalin in pus cavities or upon the skin, but I know something of it in genito-urinary work. I want to say, however, that the literature I have read on formalin gives us to believe that it should not be used stronger than 2½ per cent. on the skin, since a solution stronger than this produces decided irritation and prevents the beneficial effect. In sterilizing urethral instruments formalin is used quite a great deal, and it acts effectively—that is, it sterilizes the instruments—but if they are used without the formalin being thoroughly removed there is con-

siderable irritation produced. I saw one case in particular, in which a gum catheter had been sterilized with formalin and then not thoroughly washed before being used, and an old stricture was so irritated that it caused considerable trouble. The literature is not as great upon the use of formalin as it might be, but I think as a germicide for the sterilization of instruments, if we take the precaution to rinse them thoroughly, we have reached almost perfection.

DR. RICKETTS: I would say in this connection that formalin is rather disagreeable to handle, since it hardens the cuticle of the fingers if you use a solution stronger than 2 or 3 per cent., and a 5 per cent. solution is rather objectionable for that reason. It may be that a 5 per cent. solution produced the hardening in the pus cavity referred to. But the pus disappeared and there has been none since. It acts just as a specimen immersed in formalin.

DR. KRAMER: When Dr. Ricketts speaks of using a 5 per cent. solution he is using really only a 2 per cent. solution, since formalin is only a 40 per cent. solution of formaldehyde.

DR. AYRES: I do not know whether the use of formalin for preserving morbid specimens is prominent with all the doctors or not, but if it is not it ought to be. This was introduced at the Ophthalmological Congress at Edinburgh, four years ago, and when I came home I bought some of it and have been preserving specimens in it ever since. When preserved in formalin the cornea does not change its color, so that you can keep it as a macroscopic specimen for any length of time, and then, if you want to, you may make microscopic slides from it. I use formaldehyde in purulent inflammations of the conjunctiva, and also in purulent inflammations of the ear. For this purpose I use a 1:5,000 solution, which smarts the conjunctiva a little, but not very much, and if it does I reduce it one-half. In the ear I use formalin in stronger solutions. I am sure it is a remedy that will be appreciated if it is used more generally.

DR. DRURY: In the last number, I think it is, of the LANCET-CLINIC, there

is a report taken from one of the German journals, I think it is the *Wochenschrift*, in which the author states that he had used one drop of a 40 per cent. solution in one hundred drops of water in a case of acne rosacea of ten years' standing. The method used was by making injections into the skin, not under it, from half a drop to a drop at a time, with the result of restoring the normal condition of the skin entirely. The redness of the face incident to that trouble entirely disappeared with a return of the normal whiteness of the skin.

Tracheotomy in Diphtheria.

DR. C. E. CALDWELL: I will report a case of tracheotomy in diphtheria, in a four-year-old child, in which there was a history of three successive intubations without success—that is to say, that apparently the dyspnea was not relieved by the intubations. I was called to see the child during the month of January of this winter, at 11:00 o'clock at night, and found it with some dyspnea. The appearance of the throat was suggestive, but not altogether conclusive. There were some small spots on the tonsil, that were really more suggestive of follicular tonsillitis than of diphtheria. I left some solvent medicine for the night and returned early the next morning with some antitoxine and an antitoxine syringe. I was unable to obtain two thousand units of the antitoxine, and so gave one thousand units at that time, intending to give the two thousand in the afternoon. In the afternoon I intubated. The relief of the dyspnea was partial. After the tube was in some time the child had a violent cough and dislodged the tube. It drew the string away from behind the ear and later it was recovered from the esophagus. I was first called Sunday night. Tuesday evening I came, intending to intubate again, but the child became so apneic that we made a tracheotomy, Dr. Rowe being present at the time and assisting me. We made a rapid tracheotomy. The blood was perfectly black, and apparently the circulation had ceased in the veins of the neck. The child was apneic. After the

introduction of the tube it was three or four, and may be five, minutes before the child could be made to breathe. Dr. Rowe made artificial respiration while I was placing the tube, and after a time the child coughed and expelled some matter, pultaceous in character. After the removal of the tube, in five days, the child did well, and at the end of a week was apparently well and happy as could be. I never had performed tracheotomy on a child *in extremis* as this one was. It had a very fat neck and the operation was quite difficult.

DR. KIELY: I would like to know how much the tonsils were enlarged, how long the child was sick before the doctor saw it, and if the membrane was thick and pultaceous before he introduced the tube.

DR. CALDWELL: I saw the child on Sunday night; the child had been playing with its brother and baby sister. The first intubation was made the afternoon of the next day. The inflammation in the pharynx spread very rapidly, and yet when the intubation was made there was evidence that the antitoxine was taking hold. In the very fact of the use of the antitoxine where the disease had invaded the larynx and there was swelling of the membrane, would I account for the continued dyspnea. In the first intubation there was considerable membrane expelled, but it was very soft, and had evidently been affected by the antitoxine. There is, of course, no doubt about the membranous or diphtheritic nature of the disease. The membrane expelled through the tube was evidence of that. I think there was no infection of the tracheotomy wound and no extension of the disease along the edges. The tonsils were not very large; they were about the size that you would ordinarily see in cases of hypertrophy of the tonsils in children without very great engorgement or enlargement.

DR. KIELY: I asked the question not for the purpose of developing the diagnosis, but because I think it is the consensus of opinion at the present time, among those who are paying special attention to this, that the earlier we make tracheotomy in cases such as this the better for the child. With the

pultaceous membrane extending down, as was reported in this case, you will not control the dyspnea by the use of the antitoxine alone. If you make intubation, while the larger tube is a little more difficult to introduce, it may give the relief you wish for. Another point is that a thousand units of the antitoxine is of little value in a child of this age. I think if the doctor had had the proper supply of antitoxine with him on Sunday night he probably would not have needed the intubation or tracheotomy at all. It is my observation that you do not get the full effect of the antitoxine within sixteen to twenty-four hours. I do not any more leave a string attached to the tube, because of its annoyance, the liability of it being dislodged and thereby allowing milk and other foods entering the trachea. It is better to introduce the intubation-tube well into the larynx and to have the tube of sufficient size. I would not intubate, however, where I had large tonsils and a pultaceous membrane, because I would not expect any good effect.

DR. CALDWELL: There was a very good reason for the use of the string. I had to treat the case without a nurse, and the character of the membrane was such that there was danger of it occluding the tube so that it would have to be removed. As to the antitoxine, within twenty-four hours I had given three thousand units, and within forty-eight hours the child had received five thousand units of antitoxine. I do not think the case was more than three days old, at the outside limit, when tracheotomy was performed. I do not take Dr. Kiely's remarks as in any way critical, but I simply wish to explain my position in the case. I think the antitoxine was used in sufficient quantity, five thousand units having been given. As to the size of the tube, the first tube having been coughed up, I used as large a size as I could introduce into the larynx the next time.

DR. E. W. MITCHELL: I think I had one case saved by leaving the string attached to the ear. There was a very competent nurse in attendance. During the night the child coughed violently, but did not displace the tube. The tube

was stopped up, the child became blue in the face, and finally the nurse withdrew the tube by means of the string. While it is possible the child might have finally dislodged the tube, from the statement of the nurse, I think in that case the child's life was saved because the string was attached. I have always felt a little uncertainty as to which was the better plan to pursue. In the last few cases I have left the string attached, because I had previously some difficulty in removing the tube when I wished to get it out. I think some of the recent instruments for removing the tube are an improvement, and I am not sure but I shall hereafter remove the string. I have not seen much annoyance in leaving the string; after the first half-hour or hour the child becomes accustomed to it, and does not pay much attention to it. As to enlargement of the tonsils, I wish to say that I have seen at least two or three cases recover after intubation where the tonsils were very much enlarged and where there was a large amount of pulaceous membrane. One of these was a child nine months of age. However, I think the doctor's observation is probably correct in the majority of cases. I know before the use of antitoxine I looked upon all cases of considerable involvement of the pharynx as cases not likely to get well with intubation, not because the intubation did not relieve the dyspnea, but because the toxemia in those cases was so intense that the child died either from the toxemia or from the extension of the membrane down into the bronchial tubes.

Abdominal Abscess.

DR. J. C. CADWALLADER: I would like to report the following case:

W. G., aged seven years. July 14, 1897, complained of pain in his "belly." Castor oil was given with a result of free catharsis.

Evening of 15th he was taken with a pronounced chill, rigors lasting ten minutes, followed by fever. A physician was called and made a diagnosis of "malarial fever."

On the morning of the 16th patient began to vomit every few minutes for

an hour, then at intervals of one-half hour or so throughout the day. He had ten or twelve stools during said time, which contained quite a little mucus.

July 17. Restless night; vomiting continued; several stools, which contained mucus and blood. By evening this condition was slightly improved; was given toast and tea, of which he partook freely. The pain appeared again more aggravated. There had been no urine voided for forty-eight hours.

July 18. Micturition normal, urine highly colored. Stool in the evening containing mucus and blood. Pain intensified. At midnight I was called for the first time to see the case, and found a well-developed case of general peritonitis. Pulse 160, temperature 102° in rectum. There was no localized tenderness; pain was severe and extended over the abdomen. Gave $\frac{1}{8}$ grain morphine hypodermically, and ordered ten drops of spirits turpentine every two hours.

July 19. Condition much the same, except that the pain was not so severe. Ordered $\frac{1}{100}$ grain of strychnia every four hours. Pulse 40, temperature 102.5°.

July 20. Dr. C. E. Caldwell saw the case with me, and suggested giving chlorodyne in twenty-drop doses to control the pain, which proved efficacious with a few exceptions, when hypodermics of morphine were used. The turpentine and strychnia were continued. Pulse 140, temperature 101°.

July 21. Less tympanitis and pain. Pulse 130, temperature 100°.

July 22. Bowels moved six times freely; some mucus but no blood. Pain less. Pulse 120, temperature 100°.

July 23. Gave enema of fl. ex. hamamelis, 3iv to pint of water. Patient resting much easier. Pulse 120, temperature 100°.

July 24. Pain returned during the night, quite severe, localized over the region of the appendix. Pulse 140, temperature 100°.

July 25. Found just above the umbilicus a circumscribed redness of the skin about the size of a silver dollar. Pulse 160, temperature 101.5°. Dr. Caldwell

was again called and opened the abscess defined, from which fully a pint and a half of dark green fetid pus escaped. On examination we found the abscess cavity limited to the umbilical region, and the transverse colon adherent to the abdominal peritoneum at the upper border of the cavity. On the second day succeeding the operation we found fecal matter in the abscess cavity, and upon exploration found a perforation in the transverse colon about one-fourth inch in diameter.

July 27. Patient very weak and prostrated. Stimulants and strychnia. Pulse 140, temperature 99.°.

Subsequent treatment: Irrigation and sustaining treatment.

Three weeks from the first operation Dr. Caldwell opened a pocket of pus over the appendix, from which a teaspoonful of fluid escaped. This gave no further trouble, and completely healed in three days. About this time I removed a mass of fecal matter from the rectum with a spoon, as it was so tenacious and rejected all solvents; possibly had been retained in the bowel from the beginning, and no doubt a great factor in developing the dysentery, ulceration, peritonitis, etc.

DR. CALDWELL: This is a rather unusual case, and an extremely interesting one I think you will find. When I was called to see the case there was immense tympanites. It appeared that general peritonitis had set in. In the face of such peritonitis it would seem that an operation would simply be inviting an immediate end. The doctor has spoken of a localized pain over the region of the appendix. When I examined the case, however, there was no such localized pain, but the tenderness was general. The opening of the cavity without any circumscribed dullness, or apparently circumscribed abscess, would be bad surgery. Subsequent facts showed the wisdom of waiting. There are one or two explanations that may be offered. The subsequent appendical abscess which formed leads us to suppose that there may have been originally an appendicitis; that as a result of decubitus this became sub-phrenic and the pus

eventually passed out in this way. Whether this is the true explanation of the case or not I leave to your judgment. The case began with vomiting and a profuse diarrhea of bloody discharges, which would suggest a colitis with a post-peritoneal rupture of a colic ulcer. This would push forward, carrying the omentum before it. Whatever the origin of this case—and we were not able to verify the origin by autopsy—I think every one will recognize that the case presents some rather unusual features. I do not know of any case in which the abscess has opened at this point. Of course, we have sub-phrenic abscesses emptying in the loin, and appendical abscesses emptying at Poupert's ligament, but this is the first case of the kind I have run across in my reading upon the subject, although I have not especially looked up the literature on the subject.

DR. RICKETTS: Where was the opening in the gut?

DR. CALDWELL: A tube was introduced into abdominal cavity; the direction of this tube was sub-omental, and it could be distinctly felt running across. The opening in the gut was not the opening through which the abscess fluid came; this was a small fecal fistula that formed afterwards. The small nipple-like eminence in the omentum was found several days afterward, but that was not the point from which the pus came. The fecal fistula occurred distinctly from adhesion of the transverse colon to the under side of the omentum, whereas the tube went transversely, undoubtedly between the stomach and the transverse colon. Whether or not it entered the lesser peritoneal cavity, of course, I do not know.

DR. KRAMER: What caused the fecal fistula?

DR. CALDWELL: The simple adhesion of the transverse colon with possibly another ulcer in the colon. Evidently the pus did not come out of the fistulous opening. All subsequent flows of pus were from the cavity entirely away from this fistula.

DR. GILES MITCHELL: Was the opening in the bowel present before the tube was introduced?

DR. CALDWELL: No. This small opening we did not notice for several days; it would not admit more than a very small probe, and it certainly could not have given exit to the matter, which gushed out in a large stream. This boy was wasted to a skeleton; for weeks he lived with his legs flexed, and, in fact, we looked upon the case with forlorn hope.

DR. B. M. RICKETTS: There can be no question as to the proper course to have been pursued in this case, since we have a living child to tell the story. As to the diagnosis, the case was evidently one of appendicitis, and the burrowing of the pus was merely another way of getting out. As the doctor has said, there are many ways for the pus to make its exit. The thing of most interest to me is how this fistula developed. I do not believe that fistulæ develop from adhesions to the parietal wall; I do not believe that the peritoneum of the intestine adherent to and abdominal wall would produce a fistula or a necrosis of tissue to any degree. I would like to ask if a tube was introduced here or was allowed to remain in this wound from the time of operation.

DR. CALDWELL: A large rubber drainage-tube, probably half an inch in diameter, was introduced into the cavity and allowed to remain.

DR. RICKETTS: I think that was the source of necrosis. That is one of the dangers of using tubes in the abdomen. I have often spoken of that here in the Academy, and it is the reason I use gauze. That is one of the great dangers in using glass or rubber or anything but gauze, and in all probability the tube was the cause of this fistula. I do not believe in using any material for drainage in the abdominal cavity except gauze.

DR. CADWALLADER: The colon was packed with a fecal mass, which I spoke of removing by mechanical means, and my diagnosis at the time when the peritonitis was general and fully developed, was that it was the result of acute dysentery. There was, no doubt, considerable ulceration in the colon and perforation as a result.

DR. B. M. RICKETTS: As far as the

discharge from the rectum is concerned, the bloody mucus, that is one of the characteristics of appendicitis. I believe it was one of those appendical cases in which the pus escaped into the bowel and out. That very often occurs.

DR. KRAMER: It seems to me we are all hunting around for the most difficult explanation of this condition. It seems to me the most simple one would be that you had, as a result of dysentery, an ulcer, and before it ulcerated through there was an adhesion with peritonitis and the material came out through the intestine. When you opened it up the material was discharged, and only when the material was discharged was the doctor able to see the hole.

DR. CALDWELL: I would like to ask Dr. Kramer if he was listening when I cited this as a possible condition. The question of dysentery was brought up. There is nothing new or startling in Dr. Kramer's suggestion.

DR. KRAMER: I know; that is the reason I brought it up.

DR. CALDWELL: In regard to the suggestion of the tube as a cause of the fistula, if Dr. Ricketts had been present he would have seen the manifest impossibility of such a causation. In the first place, the operation was made at night, and the first available thing, a piece of rubber tube, was used. This was removed the next morning and another tube introduced. The tube was left in because the flow of pus was so constant. The cavity was large enough to hold a pint and a half, or perhaps a quart, of pus. The tube was not in contact with the transverse colon anywhere, where it could do any harm. The fistula was on the outer margin of the omentum, and was evidently the result of the colic ulcer. That does not shut out the possibility of an appendicitis. There may have been an ulcer in the appendix itself. It was simply a case of unusual coincidence, the appendical abscess occurring after the post-colic abscess. The pus that came from the appendical abscess was what the old pathologists called perfectly frank; it was yellow pus. The other pus was extremely nasty and offensive.

Abscess of Uterus in Puerperal Septicemia.

DR. EDWIN RICKETTS: I would like to report a case of a lady, twenty-five years of age, married, who was delivered of her second child by a midwife on March 12 inst. Dr. Dickinson, of the East End, saw her one week after delivery, finding her suffering from severe puerperal sepsis. The temperature touched 105° , going down to 100° . Pulse ranged from 100 to 120. Abdomen distended and tender. Tympanites marked. On Thursday, March 24, the temperature dropped to near normal, but the pulse did not drop accordingly. On the morning of March 25 (Friday) her condition was bad, and I was called to see her with Dr. Dickinson at 1 P.M. Upon examination a mass was found on her left side down in the pelvis. The uterus was not well "fixed." The os was open so that the point of my index finger could almost be made to enter. After going over the case thoroughly together, Dr. Dickinson and I fully agreed that surgery should step in. This was readily consented to by the family, and the abdomen was opened under chloroform. The peritoneum was of a *very dark red color*. There was nearly a pint of fluid in the abdominal cavity, and the left ovary and tube were *tucked under* and adherent, without pus in either. Through the abdominal incision I was able to palpate the fundus of the uterus and the mass to her left with the middle and index finger of my left hand, locating the pus below the left Fallopian tube and in the wall of the uterus. With this condition present I decided to drain through the os, and, if possible, not open the peritoneum. With my left middle and index finger I pressed the uterus as far down into the vagina as possible, not letting up until I had passed with some force the end of my right index finger through the os and into the abscess, turning out two or three ounces of nasty stinking pus per vaginam. After this discharge the peritoneum simply lay between my right index finger *in the uterus* and my left index finger *in the abdominal cavity*. The uterus was thoroughly

irrigated, after which a good-sized strip of gauze was packed in. The abdominal cavity was mopped dry by strips of iodoform gauze, one strip being left in for twenty-four hours, followed by a smaller strip for another twenty-four hours, after which the temporary stitch was tied. She did well under and after the anesthetic. Has not vomited, and has retained a good quantity of nourishment. Now that seventy-two hours have passed and she in such shape, we feel that the danger line has been passed. To-day her temperature is 100° , pulse 85.

DR. E. W. MITCHELL: The abscess was in the uterine wall?

DR. RICKETTS: Yes.

DR. PALMER: Do I understand that the abscess was drained per vaginam, by puncture through the fornix of the vagina?

DR. RICKETTS: No, sir; I dilated the os uteri, which was well open, tearing open the abscess in the uterine wall but *not the peritoneal covering*.

DR. KIELY: I would like to ask the gentleman the length of his index finger.

DR. RICKETTS: Long enough to do just what I described.

DR. KIELY: How long after delivery?

DR. RICKETTS: Thirteen days.

DR. KIELY: I still think the doctor must have had a very long finger.

DR. KRAMER: Why was the laparotomy made?

DR. RICKETTS: For peritonitis. In these cases of puerperal peritonitis simple incising the peritoneum has a wonderful effect in aiding a cure in which the abdominal cavity contains fluid.

DR. B. M. RICKETTS: I am surprised Dr. Kramer should ask such a question, when he knows that we have a perfect right to open the abdominal cavity for the purpose of diagnosis.

The CHAIR: Doctor, you must be surprised at nothing.

DR. B. M. RICKETTS: I am convinced of that this evening. In so-called idiopathic cases, and that is a term that should never be used, we may open the cavity. I believe in this

case, if the operator had not opened the abdominal cavity, he, in all probability, would have entered the cavity through the uterus.

DR. EDWIN RICKETTS: I do not want to prolong the discussion, but a few words in closing. I knew I had pus in the abdomen or uterus, and I was determined to find it and remove it. Fortunately, we did not have multiple abscesses. It was by the sense of touch through the abdominal incision that I localized the pus. We had three conditions to deal with—pus in the uterine wall, adherent left ovary and tube, and peritonitis with fluid in the abdominal cavity. The abdomen needed to be opened, and it was just as important to do that as it was to empty the pus in the uterus. Operators do not like to open up abscesses of that kind and deal with pus through the peritoneum, for it is very dangerous. The manner of diagnosis is just as I have given it to you. Fortunately, the patient was very level-headed, and all of the family we had to come in contact with were the same. I have no apologies to make for my short fingers, for opening the abdomen, or for introducing my finger through the os and opening up the abscess in the uterine wall.

Cervical Adenitis.

Attention has been drawn to the relations existing between cervical adenitis, and the condition of the teeth of the inferior maxilla. Sub-maxillary glands of dental origin have generally been treated with resolvent ointments in ignorance of the primary cause and consequently with but very little benefit to the patient. Certain teeth, healthy in appearance, frequently produce adenitis even at a considerable distance, as may be proved by seeing it disappear after avulsion of the offending tooth. Disease of the tooth seems, according to Dr. Marchandese, to be the most frequent cause of this affection. Where the molars of the upper jaw are affected, the inflammation is propagated in parotid ganglions by the frontal group of lymphatics.—*Paris Cor. Med. Press and Circular.*

Bibliography.

THE ESSENTIALS OF BACTERIOLOGY.

By THEODORE POTTER, A.M., M.D., Professor of Pathology and Bacteriology in the Medical College of Indiana; Member of Consulting Staff of the Indianapolis City Hospital, etc. Indianapolis, 1898.

This little book consists of a number of articles read before the Indiana State Medical Society between the years 1890 and 1897. As the subjects treated are so closely allied, unavoidable repetitions frequently occur, and rather add to the reader's enjoyment than otherwise, for not only are the facts impressed upon one more closely, but the author has always added something more or presented his subject in a new light. Covering as the book does a period of time during which great strides have been made in bacteriology, this progress is admirably shown as we proceed from the first chapter to the last. Each article is intended to be complete in and of itself, and the whole makes a volume of charming readable English that has probably no equal on the subject. No attempt is made to make it a laboratory guide, and the technique of bacteriology is not mentioned; it is simply an epitome of what important influence this branch has exercised upon the progress of medicine. The germ theory of disease, the infectious diseases, and serum-therapy, are the topics on which most stress is laid. The close insight the author has into his subject will be shown by the following extract from his essay on "Antitoxic Serum Therapy": "Remembering that this new principle will doubtless be brought forward, and is being brought forward, in the treatment of other diseases, we must guard against hasty enthusiasms based upon insufficient scientific experiment, and we shall certainly have to guard against its commercial exploitation. Already, unless the signs are misleading, the latter evil is beginning to show itself. Plausible discoverers, with proprietary medicine schemes behind them, may create some stir among the unwary, for the nostrum business is flourishing even

in the profession. But surely there ought not to be much difficulty in distinguishing science from mercenary trickery." Dr. Potter is a graduate of the Ohio Medical College of this city.

M. A. B.

A COMPENDIUM OF INSANITY.

By JOHN B. CHAPIN, M.D., LL.D., Physician-in-Chief, Philadelphia Hospital for the Insane. Illustrated. Philadelphia: W. B. Saunders, 1898.

Narrates in a clear, easy manner the modern-day aspects of the abnormal conditions of the mind, their mode of recognition, and the method of management. The non-technical style, while omitting none of the essential points, makes the book especially valuable for a legal library. The chapter on the issuing of "Medical Certificates" for the commitment of the insane is one that should be read by all, irrespective of profession or occupation. The volume is well illustrated.

M. A. B.

"APENTA" is the title of a little work published in London containing reports and opinions of such prominent men as Prof. Pouchet, of Paris; Profs. Liebreich and Gerhardt, of Berlin; Prof. Liebermann, of Buda Pesth; Profs. Althaus and Tichborne, of Great Britain; Prof. Bogoslawsky, of Moscow, and others, who, after clinical observations and analysis and other investigations, speak of the "Apenta" Hungarian Natural Aperient Water in the highest terms.

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The "Reference Book of Practical Therapeutics," by Frank P. Foster, M.D., Editor of *The New York Medical Journal*, which has recently been issued by D. Appleton Co., of New York City, contains an article of which the following is an excerpt, which we feel expresses the consensus of medical opinion as adduced by actual results: "Antikamnia is an American preparation that has come into extensive use as an analgetic and antipyretic. It is a white, crystalline, odorless powder, having a slightly aromatic taste, soluble in hot water, almost insoluble in cold water, but more fully soluble in alcohol.

* * * * *

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narcotics. It has been much used, and with very favorable results in neuralgia, influenza and various nervous disorders characterized by melancholia. The dose of antikamnia is from three to ten grains, and it is most conveniently given in the form of tablets."

We may add, that the best vehicles, in our experience, for the exhibition of antikamnia are Simple Elixir, Adjuvant Elixir or Aromatic Elixir, as also brandy, wine or whiskey. It can also be readily given in cachets or capsules, but preferably tablets, as well as dry on the tongue in powder form, followed by a swallow of water. When dispensed in cachets or capsules it should be put into them dry. Antikamnia tablets should be crushed when very prompt effect is desired and patients should always be so instructed. The conditions of the stomach frequently present unfavorable solvent influences and they can be thus overcome.

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R Antikamnia (Genuine)..... 3 ℥
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Elix. Aurantii..... 3 ℥
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**GUN SHOT WOUNDS OF THE
ABDOMEN.¹**
WITH REPORT OF FIFTY-EIGHT
CASES.

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This subject, though often written about, still retains a great fascination for surgeons. It is, and has been, one of the most unsatisfactory (in point of prognosis) of the many conditions brought under his notice, and the endeavor to and hope of improving statistics has led to repeated efforts along new lines. No one claims that we have reached a satisfactory conclusion in regard to these cases, but there has been evidence adduced which seems to point to a better day in this branch of surgery.

Permit me, in introducing this subject, to quote a short account of a recent case which possessed many interesting features.

Nannie F., a mulatto girl, twenty-six years of age, had usurped the place belonging to the wife of a gentleman of color, and this led to complications of a domestic nature which culminated in an attempt, on the part of the aforesaid male, to remove both of them from this world. The wife received a wound from a 32-calibre pistol which caused her demise about two hours later; the heroine of our sketch received a wound in the right temporal

region and another in the abdomen two and one-half inches below the umbilicus and three-quarters of an inch to the left of the median line. The shooting occurred at 9:30 on the morning of October 10, 1897. She had eaten nothing since 6 the previous evening.

When she arrived at the Cincinnati Hospital (about 10:30 A. M.) her pulse was rapid but of fair force; she was perspiring freely, and there was considerable pain and tympanites.

So soon as the abdomen could be properly sterilized she was taken to the operating-room. Examination with a probe proved the wound to be penetrating in its nature.

The abdominal cavity was now opened by a free incision. Blood in large quantity welled up and flowed from the wound. The mesentery was quickly explored for bleeding points, and five perforations in it were closed in order to prevent further bleeding. Eleven perforations of the small intestine were then closed with Lembert sutures. An intussusception, easily reducible, was found in the ileum. No other perforation could be found, so the cavity was thoroughly irrigated with hot sterilized water, a drainage-tube (glass) was inserted at the lower angle and the rest of the wound sutured. The patient rallied from the operation nicely.

On the following day, October 11, everything was progressing nicely; the drainage from the tube became serous, so the tube was removed twenty-four hours after its insertion. Food was withheld from the patient.

On the 12th the temperature remained at about 99°. A plain enema was given, which produced a copious stool.

On the 17th there was an elevation of temperature to 101°, and pus was

¹ Read before the Academy of Medicine of Cincinnati, February 14, 1898.

discovered in the bullet wound. This was evacuated and the track washed out with hydrogen dioxide solution.

The subsequent history is that of a steady return to health. She was given ordinary diet on October 30; was allowed to sit up in a chair November 7; walked about the ward on the 14th, and was discharged well November 20.

(NOTE.—The wound in the head was superficial, and the discouraged and flattened ball was removed from just under the scalp.)

I am much indebted to my house surgeon, Dr. Robinson, for careful notes and other assistance in the case. The nurses also deserve much credit for their intelligent and cordial assistance.

Through the kindness of my colleagues, past and present, in the Cincinnati Hospital, I am enabled to present a recapitulation of cases of gun-shot wounds of the abdomen which have occurred in that institution. I am also indebted to Drs. N. P. Dandridge, E. W. Walker and D. D. Bramble for reports of cases other than those treated in the Cincinnati Hospital, and I desire herewith to acknowledge their kindness and to assure them of my appreciation of the same.

It seems eminently proper for one to adopt some classification for these cases, because all are aware of the great variety of these wounds, and also of the different nature of the injuries inflicted. The following classification seems to cover the field, and is here presented in order to more distinctly group them.

It is possible that this grouping may prove of service in the matter of treatment and in other ways.

The term "penetrating" applies to the abdominal wall and "perforating" to the contents of the abdomen.

CLASSIFICATION.

1. Non-penetrating wounds.
2. Penetrating but not perforating any viscus.
3. Penetrating and perforating some hollow viscus.
4. Penetrating and perforating some solid organ.
5. Penetrating and perforating hollow and solid viscera.

6. Penetrating with wound of blood-vessels.

7. Penetrating with perforation of viscera and blood-vessels.

8. Penetrating with other serious injuries or diseases.

Of cases of the first class I have records of fourteen. In two of these there is a record of marked shock being present at the time of admission, but both of these recovered without subsequent symptoms. This would lead one to believe that penetration had not occurred. The fourteen cases recovered.

One case occurring in my service and attended by Dr. C. S. Evans during my absence from the city is worthy of a short report, and illustrates the value of the method of diagnosis employed. It was a gun-shot wound of abdomen and hand.

Peter F., aged thirty-nine, saloon-keeper, single, American. While ordering a man out of his saloon, the man turned and fired a pistol at him. He threw up his right hand to protect himself and the bullet struck the palm of hand near the metacarpophalangeal joint of the thumb, passed through the hand, coming out at the carpo-metacarpal joint, struck the abdomen in the right hypochondrium, penetrated the skin, fascia and muscles. Examination showed wound of hand as described above and bullet wound of abdomen of uncertain depth. The patient was anesthetized, abdominal wound enlarged and explored. Bullet found lying right on peritoneum; it had not penetrated. Discharged well on the seventeenth day.

Under the second class, penetrating wounds without perforation of any of the viscera, I have reports of three cases. In one (Table I, No. 22), a private patient of Dr. Walker's, a 44-calibre ball was fired at close range, entering just beneath the liver and nicking the transverse colon; the mucous coat of the bowel was not injured. The abdomen was opened and the torn coats of the bowel sutured. Laparotomy was made three hours after receipt of the injury. The patient made an uninterrupted recovery. The other two cases (Table I, Nos. 9 and 14) were patients in the Cin-

cinnati Hospital. In each the diagnosis was made by laparotomy. Each case recovered. The percentage of recovery in this class is therefore 100 per cent.

It is somewhat surprising to find that it is possible for a bullet to traverse the abdominal cavity without injuring some of the viscera or without cutting off blood-vessels sufficient in size to cause alarming hemorrhage, but these cases prove that such is possible in a small percentage of cases. I well remember seeing my professor of surgery, when demonstrating surgical operations upon the cadaver, repeatedly thrust a long, two-edged catlin into the abdomen of the subject without inflicting any wound upon the viscera. The condition of the hollow viscera in a corpse is so much unlike their condition during life that I appreciate the fact that we may not safely draw deductions applicable to the living subject, yet the experiment impressed itself upon my mind at the time, and I have often been led to believe that some penetrating wounds are, for the reasons given above, classed as non-penetrating.

In class third, penetrating wounds with perforation of some of the hollow viscera, we have the reports of thirteen cases. In these cases the small intestine alone was involved six times (Table I, Nos. 3, 5 and 21; Table II, Nos. 9, 14, 25); the bladder alone once (Table II, Nos. 12); the stomach alone twice (Table II, Nos. 24 and 33). In one there were injuries to the small intestine, bladder and rectum; in one the small and large intestine and gall-bladder were injured, and in two cases the small and large intestines and the urinary bladder were injured (Table I, Nos. 11 and 20).

In the six cases where the perforations were confined to the small intestine, laparotomy was made in three cases; two of the three cases recovered (Table I, Nos 5 and 21), and the third case (Table I, No. 3) died in twelve hours from hemorrhage. The three cases not subjected to operation died of peritonitis. The case in which the bladder alone was injured was not subjected to operation, and death resulted from peritonitis on the third day.

Of the three cases of wounds of the stomach, two were not operated upon and recovered; the third was operated upon, the wounds in the stomach were sutured and found tightly closed at the necropsy; the patient died in eight hours, presumably of shock. The post-mortem examination showed a beginning peritonitis.

In the case of injuries to the small intestine, bladder and rectum (Table I, No. 20) an operation was performed and ten perforations of the small intestines were found. In one section of the bowel the perforations were so close together as to necessitate resection of three inches of the bowel; the anastomosis was made by suture. Necropsy showed wounds of the bladder and rectum, which were not discovered during the operation. Death from peritonitis closed the chapter.

Laparotomy was made in the case in which the duodenum, ascending colon and gall-bladder were injured (Table I, No. 4). The patient died on the second day of peritonitis.

In the two cases in which the small and large intestine and urinary bladder were injured, no operation was performed. Both patients died.

It seems proper at this point to call attention to a few points brought out by the cases in which the perforations were confined to the hollow viscera. They show that of the hollow viscera, the small intestine is more often injured than the other hollow organs; this is but what would naturally be expected because of its length and position. When the perforations are confined to this part of the alimentary canal the percentage of recovery is very good after laparotomy and suturing of the bowel. The percentage of recovery in this class of cases is 66½. Without surgical intervention the cases all terminated fatally. These figures are suggestive and deserve consideration.

Another seemingly important fact is brought out by considering the cases in which the stomach was perforated. Three cases of this kind are reported, with two recoveries without operation and one death in the case operated upon. In Class V will be found the record of

TABLE I.—GUN-SHOT WOUNDS OF ABDOMEN—OPERATIVE CASES

No.	Operator.	Age and Sex.	Size of Bullet—Distance.	Interval between Injury & Operation.	Character of Injury.	Condition of Patient.	Details of Operation.	Subsequent Progress.	Autopsy.	Result.
1	N. P. Dandridge	44 M		A short time	Wound on right side of sacrum, passing upwards through intestines and lodging about 2 inches on right of umbilicus. Class 3.		Laparotomy. Other details not given in the history		Small circular wound in back, a little to right and just above waist. All abdominal viscera stained with blood. Small intestine and adjacent mesentery showed two large perforating wounds at junction of peritoneal tissue on right side. Bright red colon filled with clotted blood. No perforating wound in large intestine at any point except very low down in rectum, where there were two large round openings.	Death
2	E. W. Walker	23 M			Small wound three inches below umbilicus and one inch to right of median line. Class 7.	Weak, unconscious	Under other an incision about three and a half inches long made in median line. Four perforations found in intestines and sutured with fine silk. Abdominal cavity filled with blood. A large mesenteric vein was ligated. Intestines returned to abdomen and external wound closed with silver and catgut.	Sank rapidly, without regaining consciousness.	Peritoneal cavity distended with blood; intestines matted together with recent deposits of lymph. Four wounds of small intestines, which had been closed with sutures; one of mesentery, which had caused the bleeding. The bullet had evidently lodged in right iliac region, but after diligent search failed to find it.	Death 24 hours
3	P. S. Conner	25 M	5 feet		Wound about two inches above umbilicus and one inch to left of median line, round, small opening. Class 3.	Good	An incision was made extending from about two inches below xiphoid cartilage to left of about two inches of ribs, passing to right of umbilicus; blood escaped from cavity when opened. Examination showed that the small intestine had been perforated in ten places; each of these openings were closed with five catgut sutures; two mesenteric veins were ligated. A moderate amount of blood was found in dependent portions of cavity. Wound was thoroughly washed out with Fig. Oz, 1:1000, and the intestines replaced. External wound closed with six deep silver and silk sutures.	Second day, 2 p.m., abdomen distended, tympanitic and tender; abdominal muscles hard and contracted; P. 120, T. 102. Third day, delirious and restless; T. 102.8, P. 140.	There was no repair of operative wound in abdomen; a small round wound was found two inches above and one inch to left of umbilicus. Intestines distended with gas. Ten sutured wounds discovered. The peritoneal cavity contained about two ounces of reddish fluid. Bullet not found.	Death 3d day
4	P. S. Conner	22 M	32 to 30 feet	1½ hours	Small circular opening, one-fourth to one-half inch in diameter, about an inch to right of a half to second lumbar vertebra; edges of wound retracted slightly; no bleeding. Class 3.		Under ether cut down and removed the bullet, and upon exploring found that it had been perforated in abdominal cavity. Wound pitched up. An incision then made in linea alba, extending in each direction from umbilicus about two and a half to three inches, and peritoneal cavity opened. The small intestine was found intact except upper portion of the duodenum. Sutured up one wound in ascending colon, one in duodenum and one in the gall-bladder.	No symptoms developed except restlessness; feet rigid; temperature 100 and 105.8, and remained 106.5 and 106.6 until death.	Peritoneum covered with lymph and abdominal viscera matted together in festine. Considerable effusion of blood in abdominal cavity. Perforation of small quantity of blood-stained fluid. In the ascending colon an inner and posterior aspect about three inches above valve, there was a wound closed by sutures, edges firmly united; another wound was found one-half inch above this, similar in character. The bullet plowed along side of body of third lumbar vertebra, passing between the adjacent transverse process and slightly roughening the edge of the bone.	Death 2d day

TABLE I—CONTINUED.

5	P. S. Conner	27 M	Close	9½ hours	At a point to left of median line and just below costal cartilage is a small circular ragged wound, size of 5-cent piece; slight oozing of blood from wound. Similar wound about an inch and a half below and one inch to right of umbilicus. Class 3.	Calm and collected	Senn's method of discovering wounds of intestines was resorted to; failed on account of the presence of feces in rectum. Incision four or five inches long was made in abdominal wall and tissues down to peritoneum carefully cut and separated. Small intestine was then gradually drawn through abdominal wound, beginning close to junction of ileum with cecum. Intestines found to be in a state of active hyperemia, and in numerous places in region of bullet wounds there were flakes of lymph upon the peritoneal coat. There were nine bullet wounds in small intestines, some having gone completely through the gut, while others showed small, round, black and soft patches, which readily broke down. At one point in the mesentery there was also an extravasation of blood between folds of mesentery. Very fine catgut sutures introduced, beginning on one side of wound, passing through muscular coat, out again across the wound, then introduced in a similar way on other side. In greater number of wounds the interrupted suture was made use of, but in three places where the wounds were larger the continued suture was employed. Intestines kept carefully covered and warm by hot cloths during operation. Intestines gently replaced, abdominal cavity filled up and washed out with warm water. At this time hemorrhage was considerable, evidently from incision abdominal wound. Hemorrhage was checked and parts carefully closed up.	Second day vomited a greenish matter, no pain; ordered mag.sulph. 3i, aqua 3ii, gtt. xx every hour; P. 124, T. 100.2. Third day, epistaxis in the evening. Seventh day, abdominal bandage removed; a slight oozing of a watery thin blood took place from bullet wound; T. normal. Twentieth day, abdomen slightly distended and tympanitic. Patient gradually improved; no symptoms except occasional vomiting.	Recovery 40th day	
6	P. S. Conner	19 F		A short time	Small roundish hole one inch below and three inches to right of umbilicus. Class 7.		Under anesthetic incision five inches long made in median line, extending one inch above and four below umbilicus; incision then made through peritoneum and intestines carefully taken out. Nine intestinal wounds were found; the perforations in some places were quite large, and were four inches above, five feet above and thirteen feet above ileocecal valve. The continued catgut suture was used in most places where applicable, and it was found that there was an extravasation of feces in some places. Clots of blood were found in abundance in the peritoneal cavity. After all the perforations were sewed up the abdominal cavity was washed out thoroughly with warm water. A large glass drainage-tube was placed in lower end of wound.	Sank rapidly, became suddenly delirious and death ensued.	Peritoneum covering intestines hyperemic. The internal wound is situated a quarter of an inch below the corresponding wound on external surface of abdomen. Pelvic cavity contains about four ounces of bloody serum. Stomach markedly dilated and a small perforation exists, but this is evidently the result of post-mortem changes. Intestines: Nine perforations, being situated four inches above, five feet above, and again thirteen feet above ileocecal valve; at one point of duodenum the ball just grazed the intestine, but did no damage to the mucous membrane; considerable extravasation of blood about cecum. The connective tissue in the pelvis was filled with blood. The bullet was found behind the rectum. The internal iliac artery on the right side had been perforated by the bullet.	Death 13 hours

TABLE I—CONTINUED.

No.	Opera- tor.	Age and Sex.	Size of Bullet— Dis- tance.	Interval between Injury & Operation	Character of Injury.	Condi- tion of Pa- tient.	Details of Operation.	Subsequent Pro- gress.	Autopsy.	Result.
7	P. S. Conner	32 M	Close	10½ hours	Small punctured wound about three-fourths of an inch above Poupart's ligament, and just external to middle of it. Class 7.	Fair	Under anesthetic a three-inch incision made in median line and intestines rolled out; no perforation found. There was a sudden gush of venous blood after pouring in some water, which soon ceased. A large quantity of blood-clot was removed from the abdominal cavity. Cavity washed out with sterilized warm water, a glass drainage-tube inserted and wound closed.	Three hours later, T. 100.2. Tube pumped out and 1½ ounce thick bloody fluid was obtained. When gauze taken from tube a sudden gush of thick blood occurred, which almost immediately ceased. Second day patient seized with sudden gush, sterco-raceous vomiting, vomit dark green.	In the upper part of ileum were four perforated wounds: slight peritonitic adhesions over entire gut. Wound in left iliac vein just above Poupart's ligament. The ball was lodged in the upper and posterior surface of the pubes near junction with ileum.	Death 2d day
8	N. P. Dandridge	30 F	38 or 32 Close.	About 2 hours	Penetrating wound of right buttock; wound on right side of chest, on boundary line between the chest and abdomen, a little in front of axillary line, between seventh and eighth ribs. About one hour after admission some little blood was passed per rectum. Class 5.	Fair	Entrance of wound in side opened up and traced into abdominal cavity. Abdominal section was performed at once. Considerable blood was found in the peritoneal cavity. Three openings in a knuckle of intestine. A portion of the jejunum was found in close proximity; these were sutured and abdomen closed. From one of the small openings there was oozing of blood.	Second day some vomiting and hic-cough; some blood in urine. Third day urine drawn was bloody. Fourth day three stools, last one was somewhat bloody; T. 102.8.	Bullet passed through liver a little below centre of right lobe, pierced perinephritic tissues so close to nephritic vein that a thrombus was produced, passed beneath colon and lodged in second lumbar vertebra; perinephritic tissues were filled with extravasated blood, and there was a moderate amount in abdominal cavity. The second bullet penetrated ilium just above the great sciatic notch, entered pelvis through Douglas' pouch, passed through uterus and bladder and lodged beneath right ramus of pubes; an intestinal loop penetrated (a hole of entrance and one of exit), edges bathed in pus. Wound in bladder tightly united by lymph; wound in liver beautifully united.	Death 4th day
9	P. S. Conner	23 M		A short time.	About an inch below and to left of umbilicus was a small wound; prob: passes into abdominal cavity. Just above the anterior superior spine of left ilium is felt a small hard lump, supposed to be a bullet. An inch to the right of first lumbar vertebra is small wound hole; probe can be introduced one inch. Class 2.		Morph. 1-4 gr., atropine 1-120 gr., hypodermically. Under chloroform incision made over bullet and it was extracted. A lateral incision three inches long made through abdominal walls two inches from original wound; peritoneum exposed and incised. No injury of small intestine or mesentery found. Returned to abdomen.	Second day vomited, matter fecal odor. Third day vomited several times, odor very offensive; P. 108, T. 99. Fourth day slept well; no vomiting. Improvement was gradual; no symptoms developed.		Well 42d day

TABLE I—CONTINUED.

10	J. Ranshoff	51 M	22 Close	About 1½ hours	Small penetrating wound half inch to left of median line and four inches below the umbilicus. Hemorrhage slight. Class 5.	Fair	Abdomen opened in the median line. No blood in peritoneal cavity; quite an amount of opaque fluid in the cavity. No wounds in small intestine. Over the lower part of the intestine there is the exudation of a beginning general peritonitis. Intestine carefully replaced. A punctured wound was found in the anterior wall of the stomach about three-quarters of an inch long, and a corresponding opening in the posterior wall. The wound in stomach closed with continuous silk sutures, the organ then replaced in the cavity. Cavity thoroughly washed out with sterilized water. Glass drainage-tube put in.	Sixth hour, vomiting a dark thin fluid; P. 120, T. 95. Ninth hour, vomiting continues; abdomen distended, painful and tympanitic; dressings soaked; sank rapidly.	Parietal peritoneum congested; flakes of lymph on coils of intestines. A section of small intestine ten inches long and eighteen inches above the ileo-cecal valve was found blackened and greatly congested; this proved to be a loop of intestine constituted by another loop of the bowel, approaching gangrene. On outer wall of stomach two and a half inches from pylorus, is an opening tightly closed with silk sutures; a wound in the posterior wall found in same position also tightly closed. Pericæca showed a furrow along its upper surface. Kidneys: Cystic interstitial nephritis marked. Bullet found imbedded in fat of mesentery along hepatic flexure of colon.	Death 9½ hours
11	P. S. Conner	27 M	41	20¼ hours	Wound of abdomen two inches above iliac crest in axillary line of left side; bleeding considerable; wound very large. Class 3.	Col-lapse	An incision about six inches long, beginning at umbilicus and ranging downward, made. On opening the peritoneal cavity a large amount of fluid and clotted blood poured forth. Examination revealed four perforations of small and two of large intestines; these were sutured with silk. Patient died whilst abdominal wound was being sutured.		Four wounds, all tightly sutured, found about three feet from ileo-cecal valve. Bloody fluid found in intestine; mucous membrane of small intestine at lower end congested. In large intestine, about ten inches from anus, are two unopened perforations, and two closed perforations. Tubercles in large and lower portion of small intestine. Spleen full of tubercles. Bladder: On anterior surface there is a bullet wound, and also one on posterior surface about one inch above entrance of urethra. Bullet, after passing through bladder, passed through thyroid foramen, grazing inner surface of pubis, and was found imbedded in muscles on anterior superior aspect of thigh.	Death 17 hours
12	J. Ranshoff	39 F	Close	A short time	Blackened wound 2 inches to left and above umbilicus; another wound in left thigh just below Poupart's ligament. Class 5.		Under anæsthetic a median incision made through abdominal wall. A perforation of the duodenum was found and a furrow along the lower edge of the right lobe of the liver. The gut was sewed up and the liver cauterized with the thermo-cautery.	Report missing.		Death 5 hours
13	N. P. Dandridge	25 M		A short time	Punctured penetrating wound just external to right of middle line and about one inch below free borders of ribs; hemorrhage slight. Class 5.		Abdominal section made; wound in anterior edge of liver packed with iodoform gauze; two perforations of stomach sewed up. Morph., pt. 1-8. Abdomen drained through drainage-tube every hour.		Parietal layer of peritoneum congested and covered in places with a layer of sero-fibrinous exudate; similar exudation in serous surface of small and large intestines and over surface of stomach. Stomach showed two holes, about two inches from pyloric valve, one inch and a fourth in diameter; one in anterior stomach wall and one in posterior stomach wall, sutured and was covered by omentum and an inflammatory exudation. Small intestine slightly congested. Liver: Small lacerated wound at extreme lower portion of left lobe near the fissure separating right and left lobe.	Death 24 day

TABLE I—CONTINUED.

No.	Opera- tor.	Age and Sex.	Size of Bullet— Dis- tance.	Interval between Injury & Operation	Character of Injury.	Condi- tion of Pa- tient	Details of Operation.	Subsequent Pro- gress.	Autopsy.	Result.
14	J. Ran- sohoff	30 M	32	A short time	Small wound, right lumbar region, 2½ inches from spine, three or four inches above iliac crest. Class 2.	Good	Abdominal section; bullet not found; no wound of internal organs apparent, but consid- erable blood in abdominal cavity.	Second day some vomiting. Recov- ery uncomplicated.		Recov- ery 30th day
16	J. Ran- sohoff	43 M	41	A short time	Wound of entrance just below xiphoid cartilage, the evis- cerated direction be- ing backwards and to the right. Class 4.	Shock	Incision made through abdominal wall over wound of entrance six inches long; large quantity of blood was present, and upon passing hand behind liver large amount of clotted blood was removed. A penetrating wound was found about one inch to right of falciform ligament; bullet not found; no wound of exit; intestines not perforated. Wound in liver packed with iodoform gauze.	Vomited several times; no blood. Sank rapidly.	Record missing.	Death 2d day
16	J. C. Oliver	30 M	Close	2 hours	Wound an inch and a half to right and half inch below tip of sternum. Upon probing find that course of bullet is toward median line and penetrates ab- dominal wall about ¾ inch to right of median line. Class 4.		Under chloroform incision made in median line extending from below tip of sternum down to near umbilicus. Peritoneum dark blue and very tense. Peritonium opened and a copious flow of blood followed. Ab- dominal cavity contained a large amount of liquid blood and blood-clots. Found that ball had injured the posterior surface of the left lobe of liver; no injury of stomach or intestines found.	Sixth hour, 2 a.m., passed 3x of urine, almost clear blood; 12 m. passed 3x of urine; at 2 p.m. slightly bloody; 3½ at 6 p.m. normal. Second day, urine 3viii, normal; R. 23, T. 100.6, P. 112. Fourth day, improvement marked. Sixth day, devel- oped severe attack of parotitis; T. 103.8, P. 120, R. 30; applied phenol, antifebrine, gr. iii; patient very restless. Eleventh day, semi-conscious, very restless; both parotids enormously enlarged; expression pinched and anxious. Died 2:15 p.m. twelfth day.	Record missing. again at 1 a.m. 3v of urine, also bloody; at 11 p.m. still bloody, no pain; 6 p.m. passed 3vi of urine; at 2 p.m. slightly bloody; 3½ at 6 p.m. normal. Second day, urine 3viii, normal; R. 23, T. 100.6, P. 112. Fourth day, improvement marked. Sixth day, devel- oped severe attack of parotitis; T. 103.8, P. 120, R. 30; applied phenol, antifebrine, gr. iii; patient very restless. Eleventh day, semi-conscious, very restless; both parotids enormously enlarged; expression pinched and anxious. Died 2:15 p.m. twelfth day.	Death 12th day
17	N. P. Dand- ridge	34 M	Close	A short time	Wound on left side of abdomen two inches below enal- form appendix and one inch from median line, sur- rounded by powder stains. Class 8.	Shock	Incision made from ensiform appendix down to pubis; no perforation of intestines found. Large amount of blood clots removed from abdominal cavity, also liquid blood. Bleed- ing points found below liver and same packed carefully with gauze. Liver not injured. Gauze used for drainage.	Sudden collapse oc- curred and patient died.	Considerable clotted blood in abdomi- nal cavity. Track of bullet extended through pyloric end of stomach, through diaphragm into right pleural cavity, then through lower part of lower lobe of right lung, then through ninth rib near its attachment, having caused fracture of the rib. Bullet found under the skin about two inches below angle of right scapula. Lungs. About six ounces of clotted blood in right pleural cavity from wound of lung tissue.	Death 4½ hours
18	J. C. Oliver	39 M			Wound of hand and abdomen in right hypochondrium. Class 1.		Under anesthetic abdominal wound enlarged and explored; bullet found lying right on peritoneum; had not penetrated. Wound dressed.	No outward symp- toms.		Recov- ery 17th day
19	J. C. Oliver	30 M	38 Close	5½ hours	Wound right side of abdomen 2 inches to right, ½ below um- bilicus. Class 7.	Very bad	Two perforations of small intestine sutured; Hemorrhage from unfound source.	Steadily downward	Perforations all found and sutured. Wound of right common iliac vein. Post-peritoneal hemorrhage.	Death 4 hours

TABLE I—CONTINUED.

No.	N. P. Dandridge	45 M	38 Close	About 7 or 8 hours	Two wounds: 1. midway between crest of right ilium and costal margin; 2. just above crest of right ilium and two inches back of superior spine. Class 3.	Badly shocked	Ten perforations of small intestine; resection of three inches of bowel. Hemorrhage, source unknown.	Steadily downward. Very profound shock following operation.	In addition to wounds of intestine described, there were found wounds of bladder and rectum.	Death 10 hours
30	J. C. Oliver	26 F	32 Close	1½ hours	Wound 2¼ inches below umbilicus, ¼ inch to the left of median line. Class 3.	Marked shock	Eleven perforations of small intestine and five of mesentery sutured. Large amount of hemorrhage from mesenteric vessels. Glass drainage-tube for twenty-four hours. Paralytic intussusception of ileum.	Suppuration in abdominal wall along bullet track, otherwise steady progress toward recovery.		Recovered
31	E. W. Walker	35 M	44 Close	2 hours	Wound in right hypochondrium. Class 2.	Good	No perforation of any organs. Transverse colon nicked, but mucous membrane intact; sutured divided coats.	Uninterrupted recovery.		Recovered
32	N. P. Dandridge	69 M	32 Close	1½ hours	Two wounds: 1. two inches below umbilicus and one inch to left of median line; 2. left mid-axillary line 2 inches above crest of ilium. Class 7.	Profound shock	Twelve perforations of small intestine and eight of mesentery. Hemorrhage from mesenteric vessels. Perforations all closed and bleeding checked. Drainage-tube.	Did well for forty-eight hours, when bleeding began, as shown by drainage-tube. Belly reopened, bleeding point found and ligated.	Perforations all closed. Hemorrhage came from mesenteric vessels. Cause of death: Secondary hemorrhage and shock.	Death about 60 hours

another case in which there were two gun-shot wounds (38-calibre) in the epigastrium. This was a case in Christ's Hospital under the charge of Dr. D. D. Bramble, and recovered completely without surgical intervention. Thus in this class, from a very limited number of cases, there has been 100 per cent. of recoveries when no operation was undertaken, and 100 per cent. of mortality when operation was done.

I am well aware of the fact that in this class of cases there is always an element of uncertainty as to diagnosis, and I have therefore rigidly excluded all cases which did not vomit blood and also show subsequent constitutional symptoms of serious injury. In each case included in this category I am, therefore, as certain of the diagnosis as one could be in the absence of a necropsy or of a laparotomy. This organ is entirely empty at times; its secretion is only excited by the presence of food within it; the acidity of the gastric juice may give it some antiseptic properties; the walls of this viscus are thick and the mucous membrane has a strong tendency to prolapse into the opening and prevent the passage of the contents of the stomach into the peritoneal cavity. Further, it commonly happens that perforation of the stomach is followed by emesis, and thus the material therein contained is ejected; thus does nature assist by her efforts to prevent infection. For some unknown reason the peritoneum in the upper part of the abdomen seems much less prone to cause trouble than is that membrane lower down; lastly, it is by no means an easy matter to successfully close perforations on the posterior surface of the stomach. The reasons given above probably explain why gun-shot wounds of the stomach usually do so well without surgical interference. The main idea in the treatment of these cases is to keep the stomach *absolutely* empty, not even allowing water to be taken.

We have the record of but one case illustrating the fourth class, *i. e.*, perforation of the solid viscera without injury to other organs. In this case the right kidney alone was injured. No operation was made. The patient lived

forty-one hours, death being the result of hemorrhage.

In class five are the records of but three cases. In one of these there was perforation of the liver, intestine (three), uterus and bladder (Table I, No. 8). Laparotomy was made and the three intestinal perforations were found and sutured. The wounds in the uterus and bladder were not found. Death was the result of purulent peritonitis. The injuries were the work of two bullets.

The second case (Table II, No. 7) was also wounded by two bullets. The liver was perforated, as were also the intestines in four places. No exploration was made. Death was caused by hemorrhage.

The last case in this class (Table II, No. 35) exhibited wounds of the pleura, diaphragm, spleen, stomach and liver. The bullet was of 44-calibre; there was no operation. Death followed bleeding into the abdominal cavity.

The mortality in this class was 100 per cent.

In none of the cases was there penetration with injury of blood-vessels and no wound of the viscera; there are, as a consequence, no cases which represent the sixth class.

The seventh class, penetration with perforation of viscera and blood vessels, contains seven cases. In one case (Table I, No. 19) there were two perforations of the small intestine and a wound of the right common iliac vein. Laparotomy was made, the perforation sutured, but the source of hemorrhage was not found, although its presence was recognized.

In a second case (Table II, No. 18) the ileum and its mesentery was perforated in eight different places, and a large branch of the left internal iliac vein was cut off. No operation was performed. Death in five minutes after entering the hospital.

A third case (Table II, No. 20) showed seven perforations of the small intestine, a large ragged wound of the liver and a perforation of the diaphragm. The wound in the liver was the evident source of hemorrhage. No operation was performed. Death occurred in six hours.

A fourth case (Table II, No. 11) presented wounds of the duodenum, gall-bladder, liver and ascending vena cava. Patient lived twenty-one hours.

The fifth case (Table II, No. 34) had wounds of the pleura, liver, duodenum, transverse colon, lower end of left kidney and abdominal aorta.

The sixth case (Table II, No. 23) had seven perforations of the small intestine and one of the left common iliac vein.

The seventh case (Table I, No. 23) had twelve perforations of the small intestine, eight of the mesentery, and a branch of the left common iliac vein was cut.

In two of these cases laparotomy was made, all the perforations were closed, but in each case death was the result of hemorrhage. The five cases not operated upon also died.

Three examples of the eighth class are also given. In one (Table II, No. 4) the other injury was gun-shot wound of the left elbow-joint, producing a compound comminuted fracture. In the second (Table II, No. 2) the spinal cord was cut across in addition to three perforations of the small intestine. The third case (Table I, No. 17) showed wounds of the stomach, diaphragm and lung.

Three cases (Table II, Nos. 5, 8 and 10) are here classified as doubtful. I have placed them in this category because of absence of proof, either for or against penetration. They recovered and were discharged from the hospital in a few days.

RECAPITULATION.

Total number of cases..... 58

CLASS I.

Non-penetrating..... 14
Recovery..... 14 Death..... 0

CLASS II.

Penetrating but non-perforating..... 3
Operation..... 3
Recovery.. 3 Death..... 0

CLASS III.

Penetrating and perforating hollow viscera. 13
Operation..... 7
Recovery.. 2 Death..... 5
No operation..... 6
Recovery.. 0 Death..... 6

Organs Injured.

Small intestine.....	6
Operation.....	3
Recovery.. 2 Death.....	1
No operation.....	3
Recovery.. 0 Death.....	3
Small and large intestines.....	1
No operation.....	1
Recovery.. 0 Death.....	1
Bladder.....	1
No operation.....	1
Recovery.. 0 Death.....	1
Stomach.....	2
No operation.....	2
Recovery.. 2 Death.....	0
Small and large intestine and gall-bladder.....	1
Operation.....	1
Recovery.. 0 Death.....	1
Small and large intestine and urinary bladder.....	2
Operation.....	2
Recovery.. 0 Death.....	2

CLASS IV.

Penetrating and perforating some solid organ 3

Organs Injured.

Liver.....	1
Operation.....	1
Recovery.. 0 Death.....	1
Liver and kidney.....	1
Operation.....	1
Recovery.. 0 Death.....	1
Kidney.....	1
No operation.....	1
Recovery.. 0 Death.....	1

CLASS V.

Penetrating and perforating hollow and solid viscera..... 7

Organs Injured.

Stomach and pancreas.....	1
Operation.....	1
Recovery.. 0 Death.....	1
Liver and small intestine.....	2
No operation.....	2
Recovery.. 0 Death.....	2
Liver, uterus, bladder and intestine.....	1
Operation.....	1
Recovery.. 0 Death.....	1
Liver and stomach.....	3
Operation.....	2
Recovery.. 0 Death.....	2
No operation.....	1
Recovery.. 1 Death.....	0

CLASS VII.

Penetrating with perforation of viscera and blood-vessels..... 8

Organs Injured.

Small intestine and mesenteric vessels.....	2
Operation.....	2
Recovery.. 0 Death.....	2
Small intestine and internal iliac artery.....	1

Operation.....	1
Recovery.. 0 Death.....	1
Small intestine and iliac vein.....	4
Operation.....	2
Recovery.. 0 Death.....	2
No operation.....	2
Recovery.. 0 Death.....	2
Liver, gall-bladder, small intestine, vena cava ascendens.....	1
No operation.....	1
Recovery.. 0 Death.....	1

CLASS VIII.

Penetrating with other serious injuries or diseases..... 5

Organs Injured.

Stomach and lung.....	1
Operation.....	1
Recovery.. 0 Death.....	1
Small intestine and spinal cord....	1
No operation.....	1
Recovery.. 0 Death.....	1
Non-penetrating with gun-shot wound of elbow joint.....	1
No operation.....	1
Recovery.. 0 Death.....	1
Pleura, diaphragm, liver, duodenum, abdominal aorta, transverse colon and left kidney.....	1
No operation.....	1
Recovery.. 0 Death.....	1
Pleura, diaphragm, spleen, stomach and liver.....	1
No operation.....	1
Recovery.. 0 Death.....	1

Now, having considered the cases in detail, we should be ready for a general analysis of the same. Fifty-eight cases are reported; in twenty-three, operative measures were resorted to for the purpose of repairing the damage done by the bullet or bullets. One of these cases (Table I, No. 18) was of a non-penetrating nature, and should therefore be taken out of consideration. Of the twenty-two cases operated upon, five recovered and seventeen died, or $22\frac{8}{11}$ per cent. of recoveries. Two of these recoveries (Table I, Nos. 9 and 14) should be taken out when we consider the mortality in those cases where injury to the abdominal viscera is inflicted. So that the percentage of recoveries in perforating wounds is reduced to 15. Another case (Table I, No. 22) ought also be excluded, because in it the intestine was nicked but its calibre was not opened; thus out of nineteen perforating wounds in which laparotomy was done but two recovered ($10\frac{10}{19}$ per cent.).

TABLE II.

Opera- tor.	Age and Sex.	Size of Bullet —Dis- tance.	Character of Injury.	Condi- tion of Pa- tient.	Details of Operation.	Subsequent Pro- gress.	Autopsy.	Result.
1 P. S. Conner	21 M		Ball entered just above pubes, passing out about 4 inches from entrance. Non-pene- trating. Class 1.	Good	None.	Uninterrupted re- covery. Non-pene- trating wound.		Recov- ery 6th day
2 E. W. Walker	25 M	4 feet	Circular opening over tenth rib on left side, 3 inches outside the me- dian line. Class 8.	Bad	Catheter inserted. Morph. gr. $\frac{1}{4}$ hypo. Hot fomentations to abdomen.	Second day vomited considerably.	In abdominal wall one-half inch below costal margin and one inch to left of left mammary line was found a circular orifice five-eighths of an inch in diameter, partly filled by a blood-clot. More than sixty ounces of blood found in dependent portions of cavity, besides a considerable quantity of clot that adhered to the viscera. All the viscera showed a beginning peritonitis. Small intestine was cut in three places; two openings, about ten inches below the beginning of the jejunum, about one-half inch from each other; a third opening found just below the meso-colon. The body of third lumbar vertebra was roughened on left side and found perforated by a leaden bullet, which lay obliquely across spinal canal and seemed to have completely disorganized the nervous structure. The arachnoid cavity filled with fluid blood; vessels of brain congested.	Death 2d day
3 P. S. Conner	41 M		Large non-penetrating wound of abdomen. Class 1.	Good		Wound washed out; poulticed for fifteen days, later by iodo- form powder. Tenth day abscess formed and drainage-tube introduced.		Left at own re- quest 45th day
4 D. S. Young	53 M		Comminuted gun-joint fracture of elbow joint. Two gun-shot wounds left side of abdomen, about 4 inches apart. Class 8.	Shock	Arm dressed by plaster-of-paris splint and bor- acic acid; alco- hol and water to abdominal wounds.	Second day, deliri- ous. Third day, great dyspnea.	All the bones in the elbow-joint extensively fractured. Circular wound about three-fourths of an inch in diameter, entering abdomen about one-half of an inch to left of umbilicus and on level with it, passed outwardly and slightly downward eight inches, ending in a wound less than one-half inch in diameter; at the middle line and its depth extended to the sub-peritoneal tissue; after two inches its depth became more superficial, passing through thickness of abdominal wall. Beginning peritonitis found. Intestines con- gested in arterial circulation. Kidneys fatty and contained a few cysts.	Death 3d day
5 P. S. Conner	22 M		Pistol-shot wound over region of liver on right side, about $\frac{1}{4}$ inch above free margin of ribs, about 3 inches from median line. Class doubtful.	Good	None.	No untoward symp- toms; some indura- tion about wound and some purulent discharge on the twelfth day, re- lieved by poultice.		Well 17th day
6 N. P. Dand- ridge	28 M		Wound of entrance in lumbar region in line with crest of ilium. Class (f)	Good	Bullet removed second day.	Fourth day wound showed unhealthy appearance; exuda- tious material on pressure. Sixth day great tenderness in left inguinal region; applied poultice. Gradually failed.	Record missing.	Death 11th day

TABLE II—CONTINUED.

7	E. W. Walker	26 M	38	Wound on right side about the tenth intercostal space; bullet felt on left side, having probably gone through liver, causing internal hemorrhage. Another wound posteriorly just at tip of sacrum; this has penetrated abdomen and made its exit in right iliac region, causing protrusion of sub-cutaneous adipose tissue. Class 5.	Shock	Bullet removed immediately.	Hot bottle applied; gave whiskey and morphia hypodermically; absorbed cotton dressing. Abdomen became distended, tympanic and tender; some vomiting; sank rapidly.	Blood was found surrounding spleen and in all the dependant recesses of abdominal cavity. Intestines covered with recent lymph, as were stomach, spleen and liver; clots of blood were also found adherent to intestines. Mesentery was extremely friable, and intestines readily detached, the serous coat being so friable that it tore through in a great many places. Quantity of blood in abdominal cavity, about forty ounces. Great omentum perforated in four places. At many points there were extravasations into mesentery and adjacent connective tissue, as though the result of contusions. Bladder found empty and contracted, cellular tissue to left of it being infiltrated with blood, this infiltration extending down beneath pubes and contained undigested foramen. Stomach enormously distended with gas and contained undigested milk, etc.; the mass sour and slightly offensive. Kidneys: More extensive infiltration of blood in right than left. Liver presented along the anterior surface of right lobe, on a level with portal notch, a horizontal seam as though ploughed up by some horizontal body; tunic of liver was torn apart for a distance of one and a half inches to a depth of three-fourths of an inch, and admitted the finger into a canal in its substance, evidently made by the foreign body, which had escaped just to the right of lower border of suspensory ligament. Edges of wound were irregular, stained with bile and covered with clotted blood. Gall-bladder was full of bile. Liver tissue surrounding wound showed extensive ecchymosis and bruising, evidently the result of great violence. Small intestines: Two small perforations exactly on a line with each other, at distance of one-half inch from each other, in upper part of ileum. Two inches below these was another large circular orifice, each of these openings being surrounded by extravasated blood. Just two inches from ileo-cecal valve there was a fourth perforation of intestine, of small size, surrounded with infiltrated blood.	Death 2d day
8	D. S. Young	Unk. M		Wound in left lumbar region just at margin of last rib. Class doubtful.	Drunk; frequent vomiting.	None.	Morph. suppos. ½ gr. No symptoms. Rapid convalescence.		Well 9th day
9	D. S. Young	24 M	Close	Wound in right inguinal region, about on level with a vertical line drawn through anterior superior spinous process, and about 2 inches anterior to it. Class 3.	Drunk.	None.	Morph. suppos. ½ gr. Gradually failed. Fever reached 104.	Wound in inguinal region about one inch above Poupart's ligament, and two inches anterior to anterior superior spinous process. A large amount of bloody fluid escaped from wound. Abdominal cavity contained twenty ounces of fluid blood, and the organs in lower part more or less covered by recent lymph. About two feet above the ileo-cecal valve was an opening in the intestine; this was not disclosed until recent adhesions had been torn apart, binding the external edges of the wound together. Peritoneum in the right iliac region was perforated at two points about an inch apart, corresponding to passage of bullet. From front to rear was a direct line; posteriorly the ball was found lying against the ilium, about an inch and a half from the crest, very near the sacrum, about an inch and a half from lower border.	Death 2d day
10	N. P. Dandridge	27 M	22 20 feet	Small wound ½ inch above and to left of umbilicus; probe entered only 1 inch obliquely downwards and outwards. Class doubtful.	Cold and shaking.	Hot bottles; whiskey 3ss, and morph. gr. ½. hypodermically dressed with iodoform, vaseline and absorbent cotton.	Second day, slight vomiting, slight tenderness left side of abdomen; could not pass urine, catheterized. Sixth day, slight distension and pain in abdomen; nausea slight; urine normal. Tenth day, abdomen slightly tympanic; catheterized and obtained six ounces of somewhat cloudy urine. Fourteenth day, difficult micturition; catheterized and obtained small quantity; digital examination of the rectum shows a hard mass anteriorly, although the bladder was pushed back; also the levator ani muscles lie between the hardness of the cellulitis and the rectum; ordered poultices. P.M., slightly delirious; pulse 84, temperature 100; poultices and spits. ammont. arommat. continued. Sixteenth day, vomited this morning; paroxysms of pain in hypogastrium. Gradual improvement; micturition became free and the abdominal pain subsided.		Well 33d day

TABLE II—CONTINUED.

Operator.	Age and Sex.	Size of Bullet—Distance.	Character of Injury.	Condition of Patient.	Details of Operation.	Subsequent Progress.	Autopsy.	Result.
E. W. Walker	25 M	32 Close	Wound in right hypochondrium. Class 7.	Bad; profound shock	Morph. gr. $\frac{1}{2}$ hypod.; hot bottles and blankets; whisky hypod.; sup. h. ether hypod.	Sank rapidly owing to probable internal hemorrhage; operative procedure not decided upon.	All the dependant portions of abdomen filled with a dark semi-fluid blood, mingled with fecal contents. It was found that the foreign body had passed completely through vena cava ascendens opposite third lumbar vertebra, and had imbedded itself in the bone, making a short canal whose direction was from above downwards and inwards and backwards. A 32-calibre bullet was found lying at bottom of canal. Liver: Right lobe presented about one inch above and opposite centre of its lower border, a long (inch and a half) lacerated wound passing completely through liver. Had opened gall-bladder in two places, thence through duodenum just below pylorus, making two holes in the gut, and had again opened up duodenum at angle of descending and ascending portions.	Death 2d day
D. S. Young	18 F	35 or 38 Close	Wound about 2 inches above the pubes and slightly to left of the median line. Considerable vomiting. Class 3.	Fair	Morph. gr. $\frac{1}{2}$ hypod.	Second day, catheterized and obtained 32 oz clear reddish-brown urine; no blood. Third day abdomen distended and very hard. Gradually failed.	Wound about size of five-cent piece in abdominal wall, about three-fourths of an inch to left of median line and one inch above symphysis pubis. On opening abdominal cavity found extensive recent peritonitis, bowels being agglutinated together by recent lymph. About one quart of purulent fluid tinged with blood found. Wound at extreme upper portion of bladder made by the ball; there was no counter opening in the organ. The ball found lodged against right side of lower portion of sigmoid flexure near rectum, surrounded by a mass of clotted blood and inflammatory lymph. Intestines normal.	Death 2d day
E. W. Walker	28 M	28	Circular wound size of 3-cent silver piece in right side between 9th and 10th ribs anteriorly. Some swelling and ecchymosis below and slightly to the right of nipple. Class 1.	Unconscious	Hot bottles; morph. gr. $\frac{1}{2}$; bichl. dressing for wound.	No untoward symptoms.		Well 13th day
N. P. Dandridge	47 M		Wound in left lumbar region about 2 inches from median line and a little below the level of the crest of the ilium. Class 3.	Some shock	Hot bottles; morph. gr. $\frac{1}{2}$; whisky 125; iodine form and bichl. pad to wound.	Second day, paralysis of left leg; slight vomiting; passed little urine, highly colored, contained some albumen. Gradually failed.	Considerable quantity of blood, with some inflammatory exudation, in peritoneal cavity. Jejunum was penetrated in three or four places, two of which were adherent by inflammatory material. The range of ball was forward and somewhat inward, then apparently being deflected slightly outward by the vertebra, so that the ball was found in anterior abdominal wall in left side, about opposite wound of entrance.	Death 2d day
N. P. Dandridge	22 M		Wound in right side of abdomen between anterior superior spinous process of ilium and linea alba. Hemorrhage slight. Class (7).	Drunk	Wound cleansed, dusted over with iodoform, compressed and bandage applied; morph. gr. $\frac{1}{2}$.	Vomited 7½ hours after admission; no blood. Vomited incessantly until death; no blood.	None.	Death 2d day
F. Caldwell	31 M	44 Close	Wound in right iliac region. Class 1.	Good	Wound dressed with iodoform, absorbent cotton and bandage. Morph. gr. 1-6 hypodermically.	No untoward symptoms.		Well 6th day

TABLE II—CONTINUED.

17	D. S. Young P. S. Conner	28 M	42	Wound in right side between crest of ilium and free margin of the ribs. Class 4.	Drunk	Morph. gr. $\frac{1}{2}$.	Vomited several times.	several	Extravasated blood beneath posterior parietal layer of peritoneum; six ounces of clear fluid in cavity. Tissue around right kidney infiltrated with blood; the convexity of kidney at its extreme outer margin and about the middle exhibited the track of a wound, a considerable portion of the kidney being destroyed; parts about wound and organ filled with blood. After leaving kidney track of wound ranged somewhat backwards, and ended in muscles of back immediately to right of spinous process of second lumbar vertebra. Length of wound between six and seven inches, through lateral walls of abdomen, through outer margin of kidney, into muscles of back, where the ball was found.	Death 20 hours
18	H. G. Gaylord	33 M		Circular wound $\frac{1}{2}$ to $\frac{3}{4}$ inch diameter, $\frac{1}{4}$ inch below and $\frac{1}{2}$ inch internal to right superior anterior iliac process. Probe passes about 2 inches almost directly horizontal towards the pelvic cavity. Class 7.	Shock				Bullet penetrated ileum and its mesentery in eight different places, cutting through several of the vessels; crossed the pelvis, striking left superior ramus of pubes about one-eighth inch below internal iliac vein, cutting one of the larger branches and indenting the bone, glanced upwards for about two and a half to three inches, buried itself in posterior border of left psoas magnus muscle.	Death 5 minutes
19	E. W. Walker	31 M	22 Close	Two small holes, one an inch below and to right of umbilicus, the other 5 inches to left in left iliac region. Class 1.	Nervous	Dressed with iodoform and cotton gauze.	No symptoms.			Recovery 6 h day
20	N. P. Dandridge	28 M		Wound in right thoracic region, axillary line, between sixth and seventh ribs; another in right groin just above Poupart's ligament. Class 5.	Shock	Morph. gr. $\frac{1}{2}$; wounds cleaned antiseptically and iodoform gauze dressing applied.	Sank rapidly.		Abdomen distended with gas. Peritonitis present. Large amount of clotted blood in abdominal cavity. Right pleural cavity contained some fluid and blood. From the seventh intercostal space bullet passed downwards and inwards and perforated diaphragm, then producing a lacerated wound of right lobe of liver, entered the duodenum. Liver shows extensive lacerated wound passing from above downward and backward. Small intestine perforated in several different places, two being just in upper portion of duodenum, two about middle of jejunum, three in upper portion of ileum. Bullet was found lying free in lower portion of intestine.	Death 18 hours
21	E. W. Walker	52 M		Circular opening in right lumbar region, about midway between median lines anteriorly and posteriorly. Class 1.	Good	Bleed; pad; bullet extracted; iodoform dressing.	No symptoms.			Improved 3d day
22	N. P. Dandridge	16 M	22	About $1\frac{1}{2}$ inch below umbilicus and 1 inch to left of median line is wound of entrance of a small bullet. Class 1.	Restless	Wound cleaned and dressed.	No symptoms.			Well 10th day
23	P. S. Conner	22 M	Close	Bullet hole about 1 inch superior to iliac crest, 2 inches to left of spine; hemorrhage slight. On outer surface of knee a wound of another bullet. Class 7.	Shock and collapse	Morph. gr. $\frac{1}{2}$; bullet extracted from abdominal wall after local anesthesia.	Sank rapidly.		Large amount of fluid blood in abdominal cavity. Two perforations of duodenum six inches below pylorus, two more about eighteen inches farther down, two more fourteen inches farther down; another perforation was found making seven perforations of small intestine. Course of bullet was through left ileo-psoas muscle and clipping left common iliac vein; bullet passed into and fractured external condyle of femur. Bullet was found imbedded there.	Death 5 hours

TABLE II—CONTINUED.

Operator.	Age and Sex.	Size of Bullet—Distance.	Character of Injury.	Condition of Patient	Details of Operation.	Subsequent Progress.	Autopsy.	Result.
23 J. C. Oliver	23 F	22 Close	Wound about 2½ inches below left nipple and about 3 inches inward, the second an inch below this, the third about an inch below the upper wound. Class 3.	Good	Wounds cleansed with weak bichl., followed by sterilized water; morph. gr. ¼. Stomach kept absolutely empty.	Vomited blood for ten days. Patient transferred to private department. Improved		Improved 5th day recovery
25 N. P. Dandridge	24 M		Wound on right side of abdominal wall at about the lower border of the liver; another wound on anterior surface of right thigh; two wounds also found on right wrist. Class 3.		Wounds were immediately cleansed and acetanilid applied, also gauze and cotton dressing.	Second day, vomited bile-stained material at short intervals. Slightly delirious. Abdomen tympanitic.	On opening abdominal cavity a quantity of foul-smelling gas escaped. The abdominal cavity presented the customary evidence of hemorrhagic purulent peritonitis. Stomach and abdominal viscera all covered completely by a layer of purulent lymph. In jejunum there were six holes (apparently gunshot), communicating with the peritoneal cavity and allowing free escape of fecal material.	Death 30 day
26 E. W. Walker	18 M		Wound in the continuation of the post-axillary line, right side, just below twelfth rib. Probe passes forward. In the nipple line, right side, at level of tenth rib, another linear wound. Class 1.	Good	Wound plugged to stop hemorrhage.	No unfavorable symptoms.		Well 10th day
27 J. C. Oliver	61 M	22	Wound 3 inches below the ribs and 3 inches to left of median line. On probing bullet found (?) in the rectus muscle. Class 1.		Daily dressing.	Patient has some symptoms of locomotor ataxia.		Well 6th day
28 J. C. Oliver	22 M	38	Wound just below twelfth rib, about 3 inches spinous process. The exit of the ball about 3 inches anterior. Class 1.		Rest and daily antiseptic dressing.	No unfavorable symptoms.		Well 21st day
29 C. S. Evans	31 M	Close	Wound in left side of chest, in axillary line and in seventh interspace. Class (?)	Shock	Hot water bottles applied and warm blankets around body. Infusion salt solution. Catheterized and obtained clear bright blood in last urine drawn.		No record.	Death 7½ hours
30 E. W. Walker	21 F		Wound about 5 inches to left of umbilicus. No wound of exit. Class 1.	Good	Wound cleansed and dressed.	No complications or symptoms developed		Well 7th day
31 J. C. Oliver	27 M	Close	Wound about 1½ inch below tip of sternum and to the left, about 1 inch from costal margin. Class 3.	Good	Morph. gr. ¼ hypod. Wound sterilized and dressed antiseptically. Ice-cap to abdomen.	3:45 a.m., vomited about 3 oz. same bloody. Improvement gradual; no unpleasant symptoms.		Well 3rd day
32 E. W. Walker	M	38 Close	Wound extends from left shoulder up and out of neck. Another wound extends from ensiform cartilage down below umbilicus; travels this route in abdominal wall but not penetrating it. Class 1.	Shock and alcoholism	Wounds flushed out and dressed antiseptically.	Gradual improvement; no unfavorable symptoms developed.		Improved 10th day

TABLE II—CONTINUED.

37	D. D. Bramble	38 M	Close	Two large wounds in epigastrium about 1 inch apart. Just after shooting there was profound shock. Vomited stomach contents and blood. Probable wounds of liver and stomach. Class 5.	P. 80. T. 100; General condition good	None.	Continuously toward recovery, with the exception of a decided rise of temperature (103) about the eighteenth day, associated with severe abdominal pain. Patient's stomach was full when shot; he vomited large amount of food and blood. Shot twenty-four hours before being brought to hospital.	Well
38		35 M	44	Two wounds: (1) Eighth intercostal space, right side; (2) left thigh. Class 8.		None.	Rapidly downward.	Death)
39	N. P. Dandridge	35 M	44 Close	Wound in posterior axillary line on left side between sixth and seventh ribs, and one of egress on right side between fifth and sixth ribs. Class 8.	Profound shock	None.	Lived about twelve hours.	Death

Of the thirty-five remaining cases, twelve were apparently non-penetrating. Of the remaining twenty-three cases not operated upon, three are in the doubtful class; thus we have remaining twenty cases of penetrating wounds in which no operation was done. Of these seventeen died and three recovered (15 per cent. of recoveries). The three cases that recovered were those in which the stomach was perforated (Table II, Nos. 24, 31 and 33). In one of these cases (No. 33) it is highly probable that the liver was also injured. The doubtful cases must be left out of consideration in estimating the mortality, although I am inclined to believe from the histories that two cases (Nos. 5 and 10) were penetrating wounds.

It is a little remarkable that the percentage of recoveries from penetrating wounds should be the same (15 per cent.) in both the operative and non-operative cases, but, before accepting this statement in its entirety, let us compare the cases. In the three cases which recovered without operation, the stomach and possibly the liver were the organs injured, while in the cases operated upon there were multiple perforations in two (Table I, Nos. 5 and 21); the other case (Table I, No. 22) would probably have recovered without operation.

It is also a curious fact that all the cases corresponding to those which recovered with operation died when no operation was performed, and similar cases to those which recovered without operation were attended with a mortality of 100 per cent. when subjected to operation. Possibly this may be more than a coincidence.

Time Between Infliction of the Injury and Surgical Intervention.

One and one-half hours.....	4
Recovery..... 1	Death..... 3
Mortality....	75 per cent.
Two hours.....	3
Recovery..... 1	Death..... 2
Mortality....	66.6 per cent.
Five and one-half hours.....	1
Recovery..... 0	Death..... 1
Mortality....	100 per cent.
Eight hours.....	1
Recovery..... 0	Death..... 1
Mortality....	100 per cent.

Nine and one-half hours.....	1	Death.....	0
Recovery.....	1	Mortality.....	0
Ten and one-half hours.....	1	Death.....	1
Recovery.....	0	Mortality.....	100 per cent.
Twenty and one-half hours.....	1	Death.....	1
Recovery.....	0	Mortality.....	100 per cent.
Not stated.....	11	Death.....	8
Recovery.....	3	Mortality.....	72½ per cent.

Time Intervening Between Operation and Death.—Cause of Death.

Four hours.....	2—Hemorrhage.
Five hours.....	1—Hemorrhage.
Ten hours.....	2—Shock 2.
Thirteen hours...	1—Hemorrhage.
Seventeen hours..	1—Peritonitis.
Second day.....	5— {Peritonitis..... 3. Hemorrhage .. 2.
Sixty hours.....	1—Secondary hemorrhage.
Three days.....	1—Peritonitis.
Four days.....	1—Peritonitis.
Twelve days.....	1—Pyemia.
Not stated.....	1—Peritonitis.

Calibre of Bullet.

22.....	1	Recovered.....	0	Died	1
		Mortality.....	100	per cent.	
32.....	4	Recovered.....	2	Died.....	2
		Mortality.....	50	per cent.	
38.....	3	Recovered.....	0	Died.....	3
		Mortality.....	100	per cent.	
44.....	3	Recovered.....	1	Died.....	2
		Mortality.....	66.6	per cent.	
Not stated.....	12	Recovered.....	3	Died.....	9
		Mortality.....	75	per cent.	

I have here followed the plan of the tables arranged by Martin and Hare in order to give uniformity to the statements regarding these cases.

There are many additional points of interest which might be considered in their bearing upon the cases here reported, but I shall pass them by and simply call attention to one or two that stand out prominently.

Much importance attaches to the condition of the patient when first seen. Should he be in a condition of profound shock, and were we able to differentiate between the symptoms of shock and those of hemorrhage, much good might be accomplished by awaiting reaction, but in so doing we run the risk of continuing hemorrhage on the one hand and peritonitis on the other. Increase

of the symptoms indicates a continuous loss of blood and consequent weakening of the patient. We are thus between two fires. Examination of the blood as to its percentage of hemoglobin has been suggested (Martin and Hare, p. 129) as a possible means of differentiating between shock and hemorrhage; in the former the percentage of hemoglobin will not be altered, while in the latter it will be reduced. The value of this test is uncertain, but in some cases may be of value.

It is by no means an easy matter to determine whether a bullet has penetrated or not. In such cases enlargement of the wound and following the track of the ball is the only sure way to made this point clear, and should be resorted to in every doubtful case.

When celiotomy is made, the incision should be ample for quick and thorough exploration of the abdomen. Much time and valuable opportunities are sometimes sacrificed upon the altar of small incisions.

An incision in the median line is, in the majority of cases, the preferable one, but this should be subject to much variation in order to meet the exigencies in particular cases.

Fecal extravasation is, in all probability, a very infrequent occurrence. Martin and Hare record it as occurring in 12 per cent. of the cases. Its occurrence is specifically stated in but one of our cases. In my own very limited experience there has never been an appreciable amount of fecal matter outside of the bowels. This applies to an observation both in the living and the dead subjects.

So far as my research has gone I am convinced that resection of the bowel in these cases practically removes them from the possibility of recovery. The reason for this may be the greater amount of time consumed in the operation.

Some authors have laid very great stress upon the belief that operations in less than six hours following the injury are much more apt to be followed by recovery than when the operation is done later. The two successful cases in which perforation took place were

done respectively in one and one-half and nine and one-half hours after the infliction of the injury. In each case the small intestine was perforated a number of times.

The three causes of death in this class of cases are shock, hemorrhage and peritonitis.

Without going any further into details, I desire to present for your consideration the following conclusions:

1. When in doubt as to whether a wound is penetrating or not, one is justified in enlarging the wound and following the track of the bullet in order to be certain upon this point.

2. When the wound is in a location where multiple injuries are apt to be inflicted upon the viscera immediate operation is indicated.

3. In all cases of continuing hemorrhage after a gun-shot wound of the abdomen, exploration should be made unless the patient is *in extremis*.

4. Gun-shot wounds of the stomach, liver or kidney, in the absence of the signs of continuing hemorrhage, are more apt to get well without operation than with it.

5. A large proportion of these cases has no chance of recovery either with or without an operation, because of the nature of the injury inflicted.

[FOR DISCUSSION SEE P. 482.]

Cure of Pruritus Vulva by Operation.

Von Mars (*Monats. f. Geburtch. u. Gynäk.*), in three cases of pruritus vulva under his observation, noted that the labia majora were, probably from changes due to swelling or atrophy, in a condition of entropion, hair being turned inward on the vestibule and clitoris. When the hair was carefully trimmed the pruritus at once ceased. Von Mars suggests the formation of an artificial ectropion of the labia in these cases by the removal of an elliptical piece of skin from the outer limits of the labium majus.—*Atlantic Med. Weekly*.

THE death-rate of London two hundred years ago was eighty, now it is less than eighteen.

PROSTATE HYPERTROPHY; EMASCULATION; NINE CASES.¹

BY B MERRILL RICKETTS, PH.B., M.D.,
CINCINNATI.

A slight generalization of this subject is all that may be necessary to convince those in doubt of the beneficial effects to be derived from emasculation in cases of hypertrophied prostate.

It is not the intention to burden the reader with much thought heretofore published.

That perineal section for drainage alone should be done in a few of these cases previous to or accompanying orchidectomy there can be no doubt.

The safety of this means of drainage compared with the supra-pubic method may be well estimated in cases of removal of stone. In ten thousand cases of operation for removal of stone reported recently in the *British Medical Journal*, it was found that the mortality in the supra-pubic was 11½ per cent., while that of the perineal was but 4½ per cent. This is mentioned merely to show that drainage for any purpose through the perineum is safer than supra-pubic.

There is yet much speculation as to why favorable results follow emasculation. It is also difficult to understand why in cases of mollitis osseum removal of the ovaries is followed by recovery. Nevertheless, it is a fact in both instances.

My experience in double orchidectomies for hypertrophied prostate is limited to nine cases—forty-nine, fifty-two, fifty-six, fifty-eight, sixty-one, sixty-three, seventy-two, seventy-eight and seventy-nine years of age. Two of these cases were bachelors. All were uncomplicated, being hypertrophied prostate pure and simple. Local anesthesia (cocaine) was used in all but two cases, the time required for operation in each case ranging from four to twelve minutes. In one case urine was voided eighty-four times in the twenty-four hours next

¹ Read before the Academy of Medicine of Cincinnati, November, 1898.

preceding the operation. Improvement was immediate. At the end of thirty days he was voiding his urine but eight times in twenty-four hours, and he continued to do so thereafter until his death, which was caused by uremic poison ten weeks later. Had general anesthesia been used with his impaired kidneys death would probably have been the result. It is chloroform and ether, and not the operation, which causes death.

As to getting the consent of the patient, there has been no difficulty on my part—even with the two bachelors before mentioned.

Eight of these nine cases operated upon are living and in excellent condition, one having gained more than one hundred pounds in flesh within six months following the operation.

Mudd, of St. Louis, reports an enormously enlarged prostate in a subject twenty-seven years of age, the prostate being found by post-mortem. It is therefore reasonable to presume that hypertrophied prostate may occur at any time during mature life.

In conclusion, I must say that my experience has been quite different from a few of my *confrères* here this evening, and I therefore most earnestly advise emasculation in all uncomplicated cases of hypertrophied prostate.

HINTS IN THE TREATMENT OF SUBINVOLUTION.—Among the conditions concerned in the causation of uterine diseases subinvolution is one of the most frequent and important. The reason for this is obvious. If after childbirth or miscarriage the uterus does not undergo completely the normal retrograde process if it remains enlarged, engorged, with a hypertrophied mucous membrane, inflammatory changes are readily developed and endometritis, displacements and serious pelvic disease may result. One of the chief obstacles to efficient local medication has been the lack of a topical remedy which could be safely entrusted to the patient. This want has now been fully supplied in Micajah's Medicated Uterine Wafers. These wafers are cleanly, unirritating, easily applied and their ingredients exert a depleting effect upon the engorged mucous membrane of the uterus, establishing normal circulation and thereby causing the absorption of exudates into the tissues and aiding the natural process of involution.

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of February 14, 1898.

The President, W. E. KIELY, M.D., in the Chair.

W. EDWARDS SCHENCK, M.D., Secretary.

DR. J. C. OLIVER read a paper entitled

Gun-Shot Wounds of the Abdomen
(see page 463).

DISCUSSION.

DR. N. P. DANDRIDGE: This subject is an interesting one, and has been ably presented by Dr. Oliver. Personally I have never saved one of these cases. The only perforating wound case that I was able to save was a stab-wound that was operated upon promptly and readily recovered. A greater percentage of penetrating stab-wound recover than the same character of wound due to gun-shot. Probably the intestines more frequently escape injury in stab-wounds than gun-shot.

A recent interesting stab-wound case was stabbed twice in the abdomen. One wound was in the left side, through which much of the intestines protruded; the external opening was enlarged, when we found that a considerable hemorrhage had occurred within from the wound in the muscle, which was much larger than that in the skin. It is not infrequent to find a hernia in these cases, which is easily explained when we consider the short blade of the knife, which is usually driven in to the hilt, at which part it is not sharp and ceases to do further injury to the skin, but the sweeping around of the sharp part causes damage within. I have never in other similar cases seen the muscle have such a large wound in it. The second wound was below the ribs, and had penetrated the liver for a couple of inches. This wound was packed with gauze, and gauze also packed around the wound to shut off the peritoneal

cavity. At first I thought I would sew the liver to the skin-wound, but the respirations were so great that I considered that such would be injudicious. This case was operated upon within two hours of the shooting. His condition was good, intelligence fair, answered questions well, so that the shock apparently was not great.

Another was a gun-shot case, in which the intestines were found to have six perforating or twelve wounds; there were also eight wounds in the omentum—twenty wounds in all. The progress of the case at first was satisfactory. The first day the drainage was bloody, next morning serous, but later became bloody, and continued so, and he died of hemorrhage thirty-six hours after the injury. There was two to three drachms taken out every hour, and a second operation was made in hopes of finding the source of the bleeding, but the shock was too great, and he died. An interesting condition was found at the autopsy. The wound that I closed in the mesentery Dr. Bettmann said at that point softening had commenced, which would later have compromised the case. It is probable that in taking the ligature I cut off the blood to this point.

It is very important to expedite your measures, for minutes are precious in this condition. I believe, however, that there will be a great mortality from gun-shot wounds when the abdominal contents are injured. Reports from the Charity Hospital, New Orleans, show a great number of recoveries of such cases, a success that is exceedingly great, but why it is I don't know. It depends upon what part of the abdomen the shot takes effect; if in the upper part the chances of success are not so great, because here we are apt to have severe hemorrhage. The stomach, particularly the posterior part, is apt to be overlooked when injured. One case I recall in which I overlooked a wound within a half-inch of the wound that I closed. If the stomach is full and a shot should be fired at it, it would injure the posterior part, because when erect and in this condition it rotates forward, but when the recumbent position is assumed the posterior part is not

visible, and thus easily overlooked. Again, when the injury is at the omental attachment there is some hemorrhage, and on account of the entanglement and the clotted blood it may give the appearance of the omentum alone being injured.

It is easier to suture the stomach than the intestines, on account of the thickness of its wall.

DR. D. S. YOUNG: I never have operated upon a gun-shot wound of the intestines. All of my observations on wounds of the abdomen were made in the army during the late war, and at the Cincinnati Hospital. The military cases were usually followed by great shock, and protrusion of the bowel was a common occurrence. Both conditions were caused by the momentum and size of the ball, the superficial covering having to be divided down to the peritoneum before the intestine could be returned. But few of the cases that reached the field hospital or stations gave immediate symptoms of hemorrhage; what occurred later we had no opportunity of observing, as they were usually hurried to the rear for final treatment. I saw two cases in which there was protrusion of the intestines that recovered. Two Confederate soldiers, at Stone River, with extensive protrusion from the abdomen near the umbilicus, were remarkable for the extent of the prolapse and the small amount of shock present. They were returned, and when I last saw them, two or three days after, were doing well. At the hospital at Goldsborough were two cases in which the large intestines and bladder were implicated, and were remarkable for the slight disturbance caused. One would stand upon his feet and hold a vessel between his limbs, and fecal matter and urine would escape commingled from the rectum and urethra. I believe that if the dead upon the field were examined a large proportion of them would be found to have died of these wounds, they subcumbing to shock and hemorrhage before they could be removed from the field. I saw perhaps twenty of these cases.

My service closed at the Cincinnati Hospital just as operations upon the abdominal viscera were being recognized

as practicable. These cases, I believe, are more frequent now than formerly. I saw but few when attached to that institution. At about the close of my duties there four cases followed each other in rapid succession. Three of them had symptoms strongly indicating penetration of the intestines, and were more or less depressed and shocked, but had no symptoms that indicated hemorrhage. All were treated by enema and cathartics; no opium was given, excepting occasionally a suppository of morphia to allay pain and over-action of the bowels. These cases all promptly recovered, without any unfavorable symptoms arising during the treatment. The remaining case presented on admission everything in a favorable condition, with little or no shock, no indication of hemorrhage, and doubt was entertained of any perforation of the intestine. He was treated as the other cases, but, as I remember, died the next day profoundly collapsed. Post-mortem showed two or three perforations of the small intestines. There was no hemorrhage or escape of fecal matter into the cavity, or peritonitis. The ball entered the muscles of the back.

During my term in the hospital (sixteen years) I never saw or heard of but one case of fecal matter escaping into the abdominal cavity. At an autopsy of a case that died on the second day from a pistol-shot I found that the contents of the intestines could be moved forward and back several times past the opening, and nothing escaped. And it was only when by checking its passage below the orifices and applying considerable force that some of the wounds were opened and the contents expelled.

I never treated a case of gun-shot in the upper region of the abdomen, but had a case of stab-wound in that region. Several wounds were inflicted by a pocket-knife over the stomach and transverse colon. When I saw him, several hours after the receipt of the wound, he was unconscious and collapsed, breathing slowly, pulse weak, temperature elevated, and the abdomen was distended with gas, and, perhaps, as we thought, with blood. The condition would not admit of operation, and we concluded to await results. Enema were given

frequently, and after two hours the bowels were relieved, great quantities of offensive gas escaping. He became immediately relieved and went on to recovery. He never received any other treatment but the enema. That the stomach or bowels were wounded, I think, was proved by the passage of dark blood.

A colored girl entered the hospital with a stab near umbilicus and extensive protrusion of the bowel, which had been exposed upon a filthy floor, and the intestine was covered with particles of coal, sand and dogs' hair, and appeared as if it had been dragged on the street. It was cleaned, the external covering of the orifice enlarged, and the intestine returned to the cavity, without any hope for the case. An enema was given and suppository of morphia, and shortly after castor oil. After the bowels acted the depression and pain, that had been present, disappeared, and she recovered. The bowels were kept soluble and quiet enjoined, this being the only treatment in the case. This was the first traumatic injury of the abdominal viscera treated by me with cathartics. It occurred during the last week of December, 1886.

My attention was first directed to the use of cathartics in injuries of this class by an observation of the late Dr. Thomas Wood, of this city. He remarked that after his operations for ovariectomy and fibroma of uterus he never felt safe until the bowels had operated. When this occurred early there never was any trouble, and when unpleasant symptoms were present they always disappeared; he gave opium and left the action of the bowels to nature. At this period opium, as advocated by Clark, was given in very large or smaller doses, according to the notion of the surgeon, to completely quiet and restrain all action of the intestines. I had frequently observed that shock had apparently paralyzed the bowels, as demonstrated by their torpidity and tympanites. In an autopsy of a fatal case of strangulated hernia the gas was confined above the strangulated portion, which was about three feet long; there was no obstruction in this part except the collapse of its sides, which, when

straightened out, the gas readily passed through it. The idea occurred to me that by arousing immediate peristaltic action the tympanites would be prevented and the other deleterious symptoms that often follow would be avoided or disappear from this treatment, as in the case of dysentery by cathartics, thereby depleting the bowels and cavity. The treatment should be immediately adopted, unless some other indication should contra-indicate it, as known internal hemorrhage and escape of fecal matter in abdominal cavity. Two years previous to its adoption in stab- and gun-shot wounds of abdomen, I followed this treatment in most of the cases of inflammation, constantly encroaching upon debatable grounds with most satisfactory results. In cases of strangulated hernia not already dangerous I always make a persistent but judicious attempt at reduction, and usually succeed. In many cases when, after symptoms have been threatening, they have always been promptly relieved by this course of treatment. More or less paralysis and inflammation of the bowel are present in these cases.

In closing, I will add that in gun-shot wounds in the omentum near the intestines I have always thought that there would be but little danger from necrosis of bowel from the extensive anastomosis of blood-vessels upon its surface. But Dr. Dandridge's case shows that we have this to fear.

DR. RUFUS B. HALL: The doctor's deductions in reference to gun-shot wounds of the stomach, as I understand them, do not hold good in all such injuries. My experience leads me to believe there are some instances of gun-shot wound of the stomach that will recover without operation, and that there are other cases that will certainly die without operation. To decide which should and which should not be operated is obviously an exceedingly delicate matter, and one of very great importance. To illustrate: I recall one instance, a young man shot over the region of the stomach with a 22-calibre bullet directly after eating a hearty meal consisting largely of blackberry jam. As near as I can recollect, it was about 1876, be-

fore such patients were treated by abdominal section; therefore, no operation was suggested or advised. The man vomited almost immediately after being shot. He walked two squares to my office and then vomited again a little mucus stained with blood. He had emptied his stomach pretty thoroughly during the first attack of vomiting. He died on the evening of the third day. Autopsy showed the general peritoneal cavity strewn in all parts with blackberry seeds. Evidently, from the history, they were forced through the perforations in the stomach into the peritoneal cavity at the first attack of vomiting.

I recall another case, a man shot with a 32-calibre bullet, perforating the stomach. He had been on a spree all day and the stomach was empty except perhaps for a little beer. He vomited almost immediately after being shot, and the dejecta was entirely liquid. This was soon after my return from Europe, while I was still in Chillicothe. I was anxious to operate, and urged an operation. The man would not consent. He made a good recovery without operation, after a tedious convalescence.

The contrast between these two cases made such a vivid impression upon my mind that I have given the subject much thought. The one man was shot when the stomach was distended with food, the other when the stomach was empty. My deduction is that a case shot when the stomach is distended with food would have a better chance to recover if subjected to an operation and the peritoneal cavity washed out. The probability is that during the efforts at vomiting part of the contents of the stomach have been extruded through the perforations into the peritoneal cavity.

DR. MERRILL RICKETTS: We must thank the essayist for the report of a most interesting subject presented in a most beautiful manner. It is about the first general report having come from our City Hospital, in which there must necessarily be much valuable material. I trust that others will follow.

How is the presence of food or any other matter to be detected within the

abdominal cavity unless an exploratory incision be made? It is far safer to explore with incision than to allow an entered cavity to go without.

It seems that there are two classes of surgery: (1) That of the country; (2) that of the city. In the first the mortality is less than in the city, probably because the work is done more promptly and the patient is not hauled around over rough roads and cobble-stoned streets, being cared for in the house nearest by. Then, too, infection does not occur so often in the country.

Shock, hemorrhage and peritonitis each can be avoided to a great degree by prompt and cleanly means.

There is no reason why the mortality should be less, as suggested by one speaker, in the New Orleans general hospital than the Cincinnati general hospital.

Anastomosis of the blood-vessels is now made possible, just as anastomosis of the gut, and in many cases where injury of the larger arteries and veins of the abdomen has occurred fine suturing will remedy and bring about complete union.

In the case of injury of the kidney, which died forty-eight hours later, I do not understand why exploration was not made. Surely, a bullet entering the kidney from in front would connect the retro-peritoneal with the peritoneal space. If the kidney was injured in such a manner as to preclude the possibility of checking the hemorrhage with exploration, what must it be without? In such an event would it not be wise to remove the kidney?

DR. WILLIAM JUDKINS: No doubt if statistics could be accurately compiled many more cases would be brought to light of recovery from gun-shot wounds of the abdomen than we have any idea of, and that, too, where no operation was performed.

I recall a case of my brother's, Dr. C. P. Judkins, of a young colored man who, several years ago, was shot in the side just below the ribs. For days and weeks there was hematuria present. He was treated symptomatically and made a perfect recovery. No operation in this case would be entertained.

In another, one of my own, a young white woman, about the time of the case just mentioned, was shot by her "friend," the ball striking her just over the liver. From the severe shock present when I saw her perforation of the peritoneal cavity was presumed, and a fatal prognosis given. The ball evidently encircled the wall of the abdomen and over (or through) the ilium, for in a week or ten days I removed it from the lower portion of the left gluteal (maximus) muscle. There was no surgical interference, and she also made a perfect recovery. Why? Like the case of Dr. Young's and this one and others, it is difficult to say, unless it is on the grounds that a woman rarely does what you expect her to do.

DR. OLIVER: I agree with a previous speaker in asserting that *all* cases of gun-shot wound of the stomach will not recover if not operated upon, but I am convinced that in an equal number of cases more will recover if let alone than if subjected to laparotomy.

It is related that when the late Dr. W. W. Dawson was called to see Vollandigham, Dr. Lewis Sayre telegraphed him: "Cut down and tie the bleeding vessel." When Dr. Sayre was called in the case of Jim Fiske, Dr. Dawson telegraphed him: "Cut down and tie the bleeding vessel." Neither one of them followed the good advice given.

The first laparotomy for gun-shot wound of the abdomen performed in the Cincinnati Hospital was made November 5, 1887. Dr. P. S. Conner was the operator. Wounds in the duodenum, ascending colon and gall-bladder were sutured. The patient died. Fully one-half of the cases reported this evening occurred previous to the above date.

Hemorrhage is about the only indication for laparotomy when the liver or kidney is injured. We cannot repair the injury done the organ, hence in the absence of signs of serious hemorrhage from these organs one would be justified in adopting tentative measures.

Some criticism has been offered regarding the case in which the kidney was injured and the patient lived forty-eight hours. In answer to the query as

to why operation was not attempted, I desire to say that this case occurred several years before the first laparotomy was undertaken for the relief of these conditions. One must not lose sight of the fact that it is not fair to judge cases of thirty years ago by our present standard.

The great mortality in this class of cases is due to several factors: One, that of transportation, has been pointed out this evening; time lost before the patient is brought to the hospital, time lost in obtaining permission to operate, profound shock, the desperate nature of the wounds—these and other causes conspire to make the chances for recovery small.

A RAPID CURE OF SCIATICA.—Dr. Bloch (*Die Heilkunde*, 1898) remarks that the general practitioner, especially in the country, is compelled to rely chiefly upon the use of drugs in the treatment of sciatica. The following case is cited as an example of the value of salophen in this class of patients: Z. T., thirty-six years old, malster, had suffered for two weeks from pains in the right leg, which he designated as sciatica. He was fully justified in this diagnosis, since he had previously had three attacks of sciatica in the right leg which lasted for from eight to fourteen days in spite of medical treatment. At his first visit, November 24, the patient limped in walking and supported himself upon a cane. The gluteal and femoral muscles appeared weaker on the right side than the left (this slight atrophic condition being attributed by him to a prolonged attack of sciatica three years before). The characteristic pressure-points of sciatica were distinctly present. Salophen was ordered in 1.0 gm. doses, four times daily, and an indifferent liniment. November 26, patient was already able to walk without a cane, with only a slight limp, and desired another supply of the salophen powders which he said acted more efficiently than any of the numerous drugs employed in his previous attacks. Under continued use of the drug, which had an admirable effect upon the pains and functional disability, the patient was completely cured and capable of work on December 4, although his attack at the beginning had threatened to be as severe as previous ones which had resisted all kinds of treatment.

DR. HENRY T. BYFORD reports in the *Chicago Medical Recorder* for April the successful removal of an enormous dermoid tumor, which weighed over seventy pounds. After the first week following the operation he placed the patient on "Maltine with Cod Liver Oil" with most gratifying results.

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DR. J. C. CULBERTSON,
317 W. SEVENTH ST., CINCINNATI, O.

CINCINNATI, MAY 7, 1898.

Editorial.

THE CARE OF COWS FOR A PRODUCTION OF A SUITABLE FOOD FOR INFANTS.

The value and importance of a wholesome food for infants is not questioned by any one, hence the method of its obtainance is a significant one.

After the supply of the mother or of a wetnurse comes a consideration of other foods. Intuitively attention is first directed to that given by the cow as being more in consonance with the demands of nature than other substitutes. In order to reach the best attainable cows' milk, the animal herself becomes a prime factor. That she should be in a healthy condition will go without saying; that she should be kept in this desirable state will also be conceded without comment. The accomplishing of this desirable proposition is the question at issue.

Given a healthy cow or herd of cows, their care involves, first, environment. Stabling for protection from cold and inclement weather is absolutely essential, and the stable floors should

be kept in as perfectly clean condition as daily scrubbing can make them. The walls and ceilings should be rubbed off and down at frequent intervals, the rubbings being followed by coats of whitewash. The lime has a sweet and purifying effect. Cows should be curried and brushed every day, the udder and parts adjacent being carefully attended to in this way. At milking it is a good plan to tie the tail temporarily to one of the cow's legs; this may be done without giving her special annoyance. The purpose of this attention, which is both simple and practical, is to prevent any droppings of dirt in the milk-pail. The currying and brushing gives health and tone to the skin by ridding it of loose hairs, scales and foreign matter which may pass under the name of dirt, which, if permitted to go into solution in the milk, causes a deleterious product, which will undoubtedly exert an evil influence upon the child.

It is well known that a nursing mother, if given certain medicines, will have the reaction of such remedies in her milk. It is also known that certain strong emotional expressions, such as grief, anger and other disturbances, always impart serious ulterior effects to the nursing child. No doubt many cases of severe colic and convulsions are due to similar emotional disturbances, and, as a natural sequence, the cow's milk has undergone such changes as to produce like evil results. Such changes in the physiological condition of the milk may not be told by the microscope, but the stomach of an infant is an organ of extreme sensitiveness. Hence, it may be stated as a truism that the cow that is selected for a production of milk for infants' food should be one of gentle and kind disposition. She should be petted and fondled, never frightened,

angered or unnecessarily disturbed. This is a factor of the very greatest importance, which is no doubt overlooked in many instances when search is made for a cause of disturbances of nutrition in the infant.

An all-important subject in this relation is the food of the cow. It is well known that certain foods greatly increase the flow of milk. Notably is this the case with what are known as distillery slops, which not only increase the flow, but also the amount of butter-fat in the milk. For this reason such slops are eagerly sought and paid for by dairymen. That such foods are detrimental to the health of the cow is well known. They cause rise of temperature, which means fever and disturbance of the entire glandular system of the animal. A continuance of such foods very soon causes loss of hair and loss of teeth. The cow is no longer in a physiological condition, and hence gives pathological or diseased milk. The poor brute is from that time on obliged to sustain life on that kind of diet. The feeding of such slops is a species of cruelty to animals of the very worst type, and the feeders should be made amenable to the severest of laws applicable to such cases. An argument is made that slop feed, when mixed in certain ratios with dry bran or meal, is not deleterious to the health of the cow. This is not true, unless the proportion of slop be very minute.

The cow's mouth, tongue and peculiar stomach indicate their creation to masticate and digest coarse food, and not slops and spoon victuals. Hence it is that cows thrive and do well when fed on good hay and corn on the ear that is chopped into nubbins sizes. The feeder or dairyman sometimes tries a boiling of his ground corn and making a hot mash for his cows. Such foods

are unwholesome, and at once produce diarrhea and feverish conditions similar to those observed in swill feeding. Bran and meal, uncooked, fed with clean hay, are wholesome for the cow.

One reason that cooked meal is unwholesome for man or beast is because of an insufficiency of the cooking. To be fit for food corn meal in the form of mush should be slowly boiled for a period of from four to six hours. Such a cooking of meal for the cow would perhaps be a provision of a wholesome food. This is a matter of importance that should be thoroughly investigated and inquired into.

Clean pasturage is also an absolute necessity and essential for a production of wholesome milk. Clean, pure water in abundance should be provided. Cows are large consumers of water, and this should not be contaminated, lest the ulterior effects be found in the milk.

To sum up: Wholesome physiological milk fit to feed to infants must be produced by cows kept in clean environments; cows that are of a kind and gentle disposition, which should be unmolested or emotionally disturbed, and fed on food that is natural to the digestive processes of the alimentary canal, a study of which is of much importance; pure water in great abundance; finally, the milker should go to his duties with clean hands and clean pail. A neglect of any of the precautions indicated will surely result disastrously to the child that depends upon cows' milk for its nutrition.

MEDICAL MEN IN THE ARMY.

Some days ago a report, believed to be reliable, came to this office that more than two thousand physicians in Ohio have tendered their professional services to the Governor of the State. This is

more than one-fourth of all registered practitioners. The report speaks well for the patriotism of the medical profession. This, however, is not out of proportion with that of other male adults capable of bearing arms, who are ready and willing to go to the front for the flag of our country.

The struggle for acceptance of service is comparable with that which took place in the spring of 1861. At that period the ratio of physicians to people was not so great as at this time, and there was for a brief period scarcely enough physicians left at home to attend to the needs of the sick. The sickness and mortality-rate was greater then than now, which is a material factor in the case.

A flying visit to Chicago and St. Louis during the past week gave the writer a view of the war fire and fever that is now universal throughout the land. Old professional friends in Chicago have donned their uniforms and were given a God-speed as they left with their command for rendezvous in Springfield. G. Frank Lydston, in blue and gilt, looked a cubit taller than ever before.

From this city Drs. Hendley, Mitchell, Cullen and Castle constitute the surgical staff of the First Regiment O. N. G., all of whom will give a good report of war service.

There never was a period at any time in the past in which the medical profession of any country was so well equipped for the incidents of war as the medical profession of the United States is at this very moment. Learning, skill and resources are at a pinnacle never before touched.

APRIL 28, the Laura Memorial Medical College graduated a class of seven.

MEDICAL COLLEGE COMMENCEMENTS.**MEDICAL COLLEGE OF OHIO.**

This institution held its Commencement Exercises at the Odeon on the evening of May 3, at which the following list of twenty-eight were graduated:

Charles M. Beal.	George W. Beeghly.
Charles Cicero Berlin,	Orange Edwards, B. S.
B. S.	Joseph C. Flowers.
Robin W. C. Francis,	Frank Blaine Gilles-
A. B.	ple.
C. Lee Graber, B. S.,	Earl Harlan.
Ph.G.	Samuel Iglauer, B. S.
Loria Knee, B. S.	James W. Leahy,
Joseph A. Link, Jr.,	D.D.S.
John Wm. McKee,	Stephen C. Markley,
Ph.G.	A.B.
Thomas Elder Mar-	Henry W. Martin,
shall, A.M.	B.S.
George M. Mason.	Wm. Henry Meyer.
Oscar Seidel.	Arthur Howard
Albert A. Sprague,	Smith.
B.S.	Albert A. Sprague,
Harry Thomas.	B.S.
Thomas H. Troute.	George Francis Van
Louis A. Walton.	Pelt, B.S.
David Este Weather-	Elmer U. Wood,
head.	A.M.

On the same date the

MIAMI MEDICAL COLLEGE

Held its Commencement Exercises at the Auditorium, where the degree of M.D. was conferred upon the following class of twelve:

Charles Newton	Charles Frances
Beale.	Beeson.
John Samuel Boggs.	Carl Henry Breiden-
James Madison Crall.	bach.
George B. Dean.	Frank Alexander
Charles L. Ketcham.	Krautz.
Charles Edward	Matthew Mason.
Miller.	Adam Fitzhugh Saun-
Thomas Henry Wood.	ders.

In the evening each of the colleges gave the customary banquet in honor of their new alumni. The occasions were made merry by toasts and speeches, and will be remembered as the annual feast day of their respective colleges.

It will be observed that the number of graduates is much smaller than for many years, which is due to the extension from the three to four years required course of study. While it would be some-

what hard on the prosperity of a class of schools which are doing excellent work in the educational field, it would be well for the medical profession at large if by some means the classes of all schools could be reduced in size to an approximate meeting of the demands of the period for practicing physicians.

THE ECLECTIC MEDICAL INSTITUTE.

This school will hold its Commencement Exercises at the Auditorium, and graduate a class of forty-seven.

EDITORIAL NOTES.

THE third annual meeting of the Western Ophthalmologic and Otolaryngologic Association was held in Chicago on April 7 and 8, 1898. The address of welcome was made by Dr. F. Honrotin, President of the Chicago Medical Society, who, in a felicitous speech, extended to the members the hospitalities of the city of Chicago. Dr. A. Alt, of St. Louis, responded for the Association. The annual address was then read by the President, Dr. B. E. Pryor, of Kansas City. After the usual routine business had been concluded, a scientific communication was then read by Dr. Herman Knapp, of New York City.

The Ophthalmologic and Otolaryngologic sections each held five separate and two joint sessions, many articles of interest being read and discussed. The last joint session was occupied with the exhibition of clinical cases.

The Committee of Arrangements, of which Dr. J. E. Colburn, of Chicago, was Chairman, was unremitting in its attention to the guests, and nothing was spared that would contribute to the entertainment of the visitors. Thursday evening the members were invited to the hall of the Chicago Athletic Club,

where a special programme had been arranged for the entertainment of the members.

The following officers were elected for the ensuing year: President, Dr. J. Elliott Colburn, of Chicago; First Vice-President, Dr. W. Scheppegegrell, of New Orleans; Second Vice-President, Dr. Casey A. Wood, of Chicago; Third Vice-President, Dr. H. Gifford, of Omaha, Nebraska; Treasurer, Dr. W. L. Dayton, of Lincoln, Nebraska; Secretary, Dr. F. M. Rumbold, of St. Louis, Mo.

New Orleans was unanimously selected for the next meeting, which will take place just before the Mardi Gras of 1899, thus allowing the members of the association to conclude their scientific session with the gaities of the carnival season.

DR. JOHN A. MURPHY has been appointed a member of the Board of Trustees of the Cincinnati Hospital. Some improvements in methods of management in this institution may be looked for. There is room for them. Limited time service of staff should be inaugurated in sheer justice to the medical profession of this city.

RAILROAD FARE TO DENVER.—The Western Passenger Association has granted a rate to Denver and return of one-half fare, plus \$2.00, thirty-day limit, for business from Chicago, St. Louis and intermediate points. Tickets on sale June 2, 4 and 5 east of the Missouri River; 5 and 6 west of the Missouri River.

THE Kentucky State Medical Society will meet in Maysville, May 11. Cincinnati and all adjacent towns should send large delegations. A warm welcome will be extended. Dr. Jos. M. Mathews, of Louisville, is President.

DR. DAVID W. YANDELL, one of the ablest and best known surgeons of the South, died at his home in Louisville, May 2. Dr. Yandell had been an invalid for several years.

Correspondence.

VISION OF RECRUITS.

DR. L. R. CULBERTSON, Zanesville, O.

SIR: I am directed by the Surgeon-General to acknowledge receipt of your inquiry of 18th inst. and to reply as follows:

Applicants whose eyes exhibit refractive errors requiring glasses for their correction should not be accepted for the line of the army. Slight visual defects which, in the opinion of the examining officer, will not disqualify for service in the line may be waived; but the same should be noted on the form for the physical examination of the recruit.

Color-blindness is not a cause of rejection, but it likewise should be noted on the form.

Applicants may, however, be enlisted in the *Hospital Corps* who are subject to refractive errors of vision; provided, these errors are not excessive, may be corrected by glasses, and are not progressive or accompanied by ocular disease. Nor do such defects disqualify candidates for appointment in the Medical Department.

Conjunctivitis, or other disease of the eye, if a temporary ailment, and susceptible of speedy cure without injury to vision, does not disqualify, but it should be noted on the examination form.

Respectfully,

C. G. SMART,

Deputy Surgeon-General, U. S. Army.

MANY manufacturers will undoubtedly advance the price of their products to the extent of the stamp tax which our Government is about to impose upon proprietary preparations, thus either reducing the profit of the retail druggists or shifting the tax directly upon your patients.

Despite the constantly increasing cost of barley, wheat, oats, cod-liver oil, quinine and other commodities which enter largely into the composition of the Maltine preparations, *we have decided to bear the tax of four cents per bottle which is to imposed upon our output ourselves.*

Although this will entail a heavy burden upon us, we deem it the duty of every patriotic citizen to contribute cheerfully and without quibbling such a share of the enormous cost of prosecuting the war as our Government may find it necessary to exact.

THE MALTINE COMPANY,

Bibliography.

AN AMERICAN TEXT-BOOK OF GENITO-URINARY DISEASES, SYPHILIS, AND DISEASES OF THE SKIN.

Edited by L. BOLTON BANGS, M.D., and W. A. HARDAWAY, A.M., M.D. Illustrated with three hundred engravings and twenty full-page colored plates. Philadelphia: W. B. Saunders, 1898. Price \$7.00.

This latest addition to the popular "American Text-Book Series" bids fair to be as successful as its predecessors. Like the others, it is not a work written exclusively for the specialist, but will appeal to the general practitioner and student as well. This point, it seems to me, combined with the uniform style of publication, the quantity of illustrations, as a rule new and good, and the large number of well-known men engaged in the compilation, is what tends to give these books so ready a sale.

As the title indicates, two large divisions are observed, genito-urinary diseases and syphilis, and diseases of the skin. The first part is introduced by a short, crisp article on urinalysis, considering, however, only its relation to special diseases of the urinary tract. Beginning with diseases of the penis, the other organs of this system are discussed in anatomical progression, concluding with surgical diseases of the kidney and the functional diseases. The unavoidable repetitions made in writing of kindred subjects by different authors in no way detracts from the merit; indeed, by presenting different views from several sources, or in expressing the same opinions in various ways, one often obtains a clearer idea. In the discussion of syphilis, the disease is not regarded alone from the dermatological point of view, but its effects on all organs of the body are mentioned. Its ravages in respect to the eye are given a separate chapter. An article on chancroids concludes the first division. Diseases of the skin proper are introduced by chapters on general topics, the anatomy and physiology, general etiology, pathology, symptomatology, diagnosis, and classification. Special diseases are divided into eight classes:

Inflammations, hemorrhages, hypertrophies, atrophies, new growths, neuroses, diseases of appendages, including sweat-glands, sebaceous glands, hair-follicles and nails; parasitic diseases, including those due to vegetable and animal parasites.

The illustrations, with the exception of the colored plates, are good; attempts to reproduce skin diseases in colors are not now meeting with any great degree of success. M. A. B.

Nerve Training.

The question of the susceptibility of the nervous system for training has recently been discussed, and a great deal of difference of opinion appears to exist as to the possibility of training the nerves. According to the most comprehensive opinion, a great deal depends on the owner of the nerves. It is possible to train certain classes and conditions, while others are hopelessly unsusceptible. The will of the individual, the pliability, or rather the impressionability, has everything to do with successful nerve training. As a matter of fact, the desire to be trained must be present first of all. It comes from within, and prompted by the desire of the individual, a course of training may bring about the happiest results. Training nerves against the will of the patient reminds one of the old adage of convincing a man against his will—"He is of the same opinion still."—*Indian Lancet*.

How to Use Politzer's Bags.

The *Presse Médicale* gives the following directions: Blow the nose carefully to rid it of mucus. Take a little water into the mouth and hold it there for the time being. Insert the end-piece of the tube deep into the right nostril, and hold it there with the fingers of the left hand, at the same time closing the left nostril with the left thumb. Then, with the right hand, squeeze the bag vigorously at the very moment of swallowing the water. Withdraw the nose-piece before allowing the bag to expand again. The insufflation should be practiced two or three times in succession. —*N. Y. Med. Journal*.

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Whole Volume LXXIX.

Original Articles.

PSYCHIC TREATMENT OF DISEASE.¹

BY PHILIP ZENNER, A.M., M.D.,
CINCINNATI,

LECTURER ON DISEASES OF THE NERVOUS SYSTEM IN THE
MEDICAL COLLEGE OF OHIO.

The treatment to be considered in this paper is the oldest, the most universally applicable, I sometimes think the most neglected, and certainly the most important, of all modes of treatment of disease. It is embraced in part in what is usually spoken of as moral treatment. It should be included in "psycho-therapy." For the purposes of this paper I have termed it psychic treatment of disease.

According to Strümpell, one-half of all cases of impaired health are of mental origin. The mind also plays a very important part in the cure of disease. The knowledge of the influence of psychic processes on health and disease is, therefore, of the highest consequence to the physician. That the mind directly affects bodily functions is well known. The blush of shame, the pallor of fear, the bounding heart of joyful excitement, the arrested breathing of fright, the vomiting or diarrhea from mental impressions, the changed character of the mother's milk from depressing emotions, the loss of appetite and weight from sorrow and grief, the plethysmographic demonstration of alterations in the peripheral circulation from any mental impression, and a thousand other similar illustrations are too familiar to need special mention. I

wish now to dwell on mental states that are important factors in the production and cure of disease.

The mental states most injurious to health are the painful and depressing emotions, care, worry, sorrow, grief, anxiety, fright, terror, anger, rage, disappointment, etc. There is scarcely a limit to their disastrous effects. Most commonly they produce mental disease or some other disorder of the nervous system, chiefly hysteria and neurasthenia. Organic nervous disease is not rarely brought on in the same manner, and any organ, especially if it has some inherent weakness, may thus become disordered in its functions or the seat of organic disease. And not only this, but the same mental states may influence the various infectious diseases, as well as the course of surgical diseases and the results of surgical operations. For we are beginning to learn that microbes, the source of infection, gain access into the human organism with more or less readiness according as the general health is deteriorated or otherwise. The depressing emotions, causing impaired nutrition and lessened vitality, lessen the defensive power of the human economy, and favor the invasion of pathogenic germs.

Unfortunately, the physician cannot, at will, remove these depressing emotions, or ward off the serious or grave disease that may ensue. And yet something we may be able to do. The mere making a full confidant of the physician, the giving, as it were, an external discharge to the emotional states in this way, will often give some relief to the sufferer, while kindly advice may soothe him or make him bear his trouble more easily. In one instance the word of the physician may be everything in preventing or curing disease; that is, where the

¹ Read before the Ohio State Medical Society, May 4, 1898.

worry or fear or dread is about one's own health, and, at the same time, in part, or altogether, unfounded. Such cases are, unfortunately, common, and years of suffering or final grave disease may ensue, which a word spoken in time might have averted.

The second great source of disease of mental origin is in the intellect. Ideas, or mental representations, cause manifestations of disease almost as frequently as the emotions; and such diseases may be very persistent, though they have not the grave character of those brought on by the depressing emotions.

A knowledge of bodily disorder resulting from the mind dwelling upon bodily functions belongs even to ancient medicine. That feeling one's own pulse may cause it to become rapid or irregular, that the sight of tremor may produce tremor, that the idea of paralysis may lead to loss of power, or the idea of having spinal disease bring on pains, or other symptoms which in the patient's mind are associated with that disease, and the more common picture of hypochondriacs, with its abdominal and other symptoms, and increase of symptoms from the patient's constant self-observation and worrying, are instances of this kind which have long been known. But how frequently symptoms are caused in this way we have only come to know in very recent years. We owe that knowledge largely to Charcot's careful studies of hysteria. I believe it is a prevalent view in the profession to-day that the symptoms of hysteria are to a great extent of mental origin—that is, the effect of mental representations. But this is not true of hysteria alone. It is true, also, though to a much less extent, of other functional, and even of organic diseases. That is, some of the symptoms of the latter may be produced by mere ideas, a fact proven by the ready removal of those symptoms. Such influences of mental representations is spoken of as suggestion, or auto-suggestion, and, we may add, sub-conscious suggestion. The manner in which such ideas may be presented to the patient's mind is manifold. Most commonly it is through

seeing the manifestations of disease in others, or reading about them, or hearing them spoken of. Our daily papers are in this way breeding-houses of no small magnitude, especially through their quack advertisements. What physician does not see patients in whom a thousand symptoms have developed with untold suffering, as the result of reading advertisements of the dire effects of old self-abuse, symptoms which his assurances of unfounded fears will succeed in removing to the largest extent.

The unfortunate custom, so common among the laity, of ceaselessly discussing sickness and sick people, is another fertile source of suggestive disease. Nor is the medical profession altogether innocent. Careless words often do great harm in this direction. Of some special modes in which they suggest disease I will speak further on.

I mentioned above sub-conscious suggestion, by which is meant the suggestion of disease where the idea does not come into the clear light of consciousness. Sub-conscious mental activity is not unfamiliar to you. Let me give a few examples. While the mind is deeply engrossed one is asked and answers a question, and a short time afterwards remembers neither question nor answer. Again, one tries in vain to remember a name, and it comes to him suddenly after the matter was apparently dismissed from his mind. Or one works over the solution of a problem, lays it aside unsolved, and awakes in the morning with the solution clearly worked out in his mind. It is very probable that sub-conscious cerebration acts in a like manner in the suggestion of disease. The suggestion, though received by the conscious mind, may have been forgotten and yet continue its blighting action on a sub-conscious stratum of mind, the more damaging because nothing is known of its presence. Or even the suggestion may have been received originally in a sub-conscious manner. Of that I shall take occasion to speak again.

We must now speak of the influence of the mind in curing disease. The painful emotions, so baneful to health,

have a very limited influence as curative agents. Fright has sometimes caused the disappearance of hysterical symptoms, aphonia, paralysis, etc., and is said to have cured attacks of gout and rheumatism. The pleasurable emotions, joy, etc., which very rarely cause impairment of health, are powerful influences in the removal of disease. Joy is the great tonic of the nervous system. It usually increases the appetite, makes the thoughts flow more easily, and favors all the bodily functions. Where we have it at our command we have one of the most valuable therapeutic agents.

Mental absorption may cause entire unconsciousness of pain, either bodily or mental, and thereby have a direct curative influence. In this way business occupation or any absorbing intellectual work or pastime may prove to be a valuable therapeutic measure.

Another great mental factor in removing disease is the appropriate mental representation, what we have spoken of as suggestion. If the idea of being paralyzed has made the patient powerless, the idea of being cured may cause the disappearance of the paralysis, or the idea that he will be cured cause its gradual disappearance. The same may occur with other diseases or symptoms brought on, mainly, in a suggestive manner. But it is highly probable that the idea, or suggestion, can do more than this; that, through its inhibiting power, it may assist in curing symptoms not of purely mental origin. What a power suggestion is in the cure of disease we have learned especially since hypnotism and its effects have been carefully studied. We have come to know that the magnet, and other measures whose wonderful therapeutic action we could not understand, produce their results in this manner. I think, if we carefully studied our cases, we would observe that many effects that we attributed to the direct influence of remedial agents were really due to mental impressions. Indeed, it is now recognized by the best men in the profession that the good effects of all our therapeutic measures may be, to some extent, due to their influence upon the mind.

This is true of drugs, of electricity, massage, baths, health resorts, etc., and even of surgical operations in many instances.

Though the great influence of mind in causing and curing disease has only been fully recognized in recent years, psycho-therapy has always been practiced. It is probable that this was the only treatment in the earliest periods, as it is the chief treatment among savage peoples to-day. It has been the means of the marvel cures of all ages. Even to-day the same agency works cures in sacred shrines, at the hands of heralded healers and the like, or with appliances like the electropoise, the iron-ring cure for rheumatism, etc., which have gained for themselves great reputations, and can have no physiological action. A thousand systems, or schools, quacks, nostrums, etc., have succeeded in the same way. They awake great expectations, inspire faith, work marvellous cures, and have their popularity of a day. Then their fraudulent claims are detected, they lose popular confidence, can work no more cures, and their day is over. The physician, too, either consciously or unconsciously, is influencing the course of diseases by the mental impressions produced. But often he is not aware of the power he is wielding for good or ill, and does not gain from psycho-therapy what the legitimate claims of the profession and duty to his patient really demand. His attention has not been sufficiently drawn to the great importance of psycho-therapy, either by his teachers or in the medical literature. The only systematic work upon this subject, so far as I know, is Loewenfeld's "*Lehrbuch der gesammten Psycho-therapie*," an able and conservative work well worthy of careful study.

I wish in the following to speak briefly of methods of application of psychic treatment.

At the first appearance of a patient we find a great therapeutic measure in our hands in the mode of his examination. A thorough examination is often of the highest value. It gives the patient confidence that the physician fully understands his case and has the ability

to manage it, and, if the appropriate assurances are given, that he will get well. It is often striking what a marked effect such an examination produces. Very often I have seen a marvellous improvement at the time of the second visit of a patient; and over and over again have physicians, who had brought patients in consultation, assured me that the disease had almost disappeared before any suggested remedies could be administered, such was the influence of the mere examination. It is true that these are usually cases of neurasthenia or the like, but it would be a great mistake to suppose that other diseases cannot be influenced in this manner. To some extent this principle is probably everywhere applicable in practice. The physician should always bear in mind this powerful means of treatment. Often, it is true, his press of duties is so great, or the account the patient gives of his illness is so prolix, that it is impossible for the physician to listen to the whole story; but he may, at least, give a thorough physical examination, which often takes comparatively little time, and may have the moral effect desired.

Now and then a thorough examination does harm instead of good. It frightens the patient by the suggestion of new diseases, or of the special gravity of his case. The result of the examination is distress to the patient; to the physician, very likely, the loss of a case. But by a little tact trouble may be avoided. Prior study of the case may tell whether it belongs to this category, and then a word in advance that it is the physician's custom to make a thorough examination, and that the indications in his case are favorable, will very likely prevent ill effects.

It is not only on such occasions that the physician must be guarded to avoid injuring the patient by his examinations—that is, by the mental effects produced thereby. Examining a special organ¹ as the heart, very frequently, or delay-

ing the expression of an opinion while awaiting further developments, often causes great alarm. The physician should attempt to ward off such ill effects, especially as it is often true that there is nothing alarming in the condition of the patient, the only trouble being the doubt in his own mind.

I fear we often do not attempt to allay unnecessary fears in patients' minds as much as we should, especially where he is reticent, and does not tell us freely of his anxiety. Many of you will remember that scene in "The Mill On The Floss" where Tom's wound has been dressed by the surgeon, who tells him nothing of what may be the subsequent effects of the injury.

Then his friend Philip says to his teacher: "I beg your pardon, sir, but does Mr. Asken say Tulliver will be lame?"

"Oh, no; oh, no," said Mr. Stillington, 'not permanently, only for a little while.'

"Did he tell Tulliver so, sir, do you think?"

"No, nothing was said to him on the subject."

"Then may I go and tell him, sir?"

"... Mr. Asken says you'll soon be all right again, Tulliver, did you know?"

"... Tom looked up with that momentary stopping of the breath which comes with a sudden joy."

So well did that wonderful observer and reader of human nature, George Eliot, recognize the natural fears of impaired health, and the frequent forgetfulness thereof on the part of the busy practitioner.

Perhaps I dwell the more upon this because on more than one occasion I have myself been so much chagrined to learn that a patient had been in great mental distress, which a word of mine might have prevented. Nor is this always a trivial matter, or only a question of more or less mental suffering, but we often fail to cure our patient altogether until we have learned of all his anxiety and fears and succeeded in removing them.

The diagnosis and prognosis given to the patient is a very important part

¹ It is doubtful whether any examination is so frequently harmful as the gynecological examination of young girls. Even in married women examination and treatment not rarely causes symptoms in the way of suggestion.

of psychic treatment. No remedy has a better influence than the assurance of a curable disease and a speedy recovery. The joy resulting from such assurance—providing there had been doubt, and fear, and trembling—will alone make a marvellous change in the condition of the patient and often lead to a speedy cure.

What is the duty of the physician to his patient when the outlook is unfavorable? The practice of unhesitatingly giving the patient a bad diagnosis and prognosis is, in my opinion, exceedingly reprehensible, and this for many reasons. Firstly, it is often an act of greatest cruelty. To be robbed in a moment of all hope, or to see death staring one in the face, is exceedingly terrifying to most individuals, a state of mind scarcely appreciated by him who coldly pronounces doom. And it is not only the suffering that is to be feared, but direct injury to health caused by this mental blow. How often have I seen the profound gloom of melancholia, or shocking acts of suicide, resulting from the tidings of having incurable disease. And, furthermore, it is not rare that this suffering, or danger, were needless; that a fatal prognosis was given without reason. Diagnosis is proverbially difficult, and errors in diagnosis common. He only has made no mistakes who has had no experience. A few days ago a lady laughingly told me that twenty-five years previously her husband and herself had been informed that they had fatal diseases, and had but a short time to live, and this by a physician of national reputation. They are both in fair health to-day. This is a jest to the lady now, but it was almost a tragedy then. And such instances are so common that every physician is acquainted with a smaller or larger number. The patient should always be given the benefit of the knowledge of manifold, and, I may say, necessary, error. It is true, there are times when the patient should be told the truth, and again there are some who can bear that knowledge better than others. But we must not allow ourselves to be misled by the statement of the patient that he wants to

know the truth. Very often that statement only means he wants you to say he has no grave disease, while the truth is in reality more than he can bear. I wish to speak my own opinion with all emphasis, that our duty is to improve or to relieve the condition of our patients as much as is in our power, and to do as little harm as possible, and that this applies fully as much to what we say to them as to the drugs that we administer. I must repeat again that it is always necessary to individualize. One can bear the knowledge of some affection of the heart (many are almost frightened to death by the suggestion of heart trouble), of the kidneys, of pneumonia, etc., better than another. Again, while it may be cruel to tell the patient he has locomotor ataxia or other dread disease, yet in case of chronic disease it is but kindness to let him know his illness will be of long standing, and thus save him the bitterness of a thousand disappointments.

There is no part of the psychic treatment of disease more important than what we have just been considering, the mode of examination of the patient and the diagnosis and prognosis given him; but I must now pass to what appears to be more direct psychic treatment, the attempted cure of disease by the ideas presented to the mind, or, let me say, suggestion. The simplest and most direct manner of the application of this treatment is the saying to the bed-ridden *you can walk*; to the blind, *you can see*, or you will be well at a stated period; and perhaps the patient will walk, or see, or be well at the stated time. Such brilliant results could scarcely be expected elsewhere than in hysteria, and rarely even there. This kind of suggestion should be made with great caution, for an entire failure may cause the patient to lose confidence in his physician. The suggestion is more likely to be successful if the effort be directed to removing one symptom at a time, then in trying to remove the disease *in toto*.

We have next to try suggestion with the help of reputed therapeutic measures. In this instance the suggestion of a cure need not be a verbal one on

the part of the physician. Indeed, there are times when promises arouse only a doubt in the patient's mind. It is especially unfortunate for the physician's influence if he have a routine method of making promises. At least it is a great aid if the suggestion be made to the patient's mind without any assurance from the physician. This suggestion may occur through the patient's having heard that the same medicine cured a case just like his own, or that the physician cured a case like his, or that the reputed effect of the drug given him is to cure cases like his. Again, some knowledge of the effects of, or a vague feeling of respect or awe as to, a given agency, as electricity, massage, etc., may lead to the expectation that it will cure his disease. And here the personality of the physician counts for much, the inspiring effect of his presence, his reputation—therefore, the influence of the consultant, of the physician for whose advice the patient has traveled a great distance, etc. To all this is to be added, when needed, the statements and assurances of the physician. It is the wise physician who knows how to turn these various measures to best account, who knows when and what to say, how to ward off the ill-effects of disappointments, and maintain the hope and confidence of his patient.

As to the selection of his therapeutic measures the physician should be guided by the character of the case. If the case apparently need nothing but psychic treatment, it will be indifferent what he selects, so that it produces the proper mental impression, and can do no harm. But as a rule he will look upon the psychic treatment as only an aid, while he treats the disease by accustomed methods. In that case he tries at the same time to make the appropriate mental impression, which will be the more easily accomplished the quicker the applied measures improve the patient's condition, or ameliorate his symptoms.

I wish to emphasize what I have already said, that we are learning to know more and more that the effects of therapeutic measures are often from their in-

fluence upon the mind, and this to an extent not formerly dreamed of. Indeed, there are some skeptics who see in electricity, massage and like measures no other therapeutic power than that of suggestion. I do not doubt that this view is erroneous, though I feel assured that in many instances this is their chief, if not only, virtue. And particularly is this often true of operations that are made for the cure of nervous disease. I am quite confident that in many of the cases I have seen in which operations—upon whatever organ—have been made for nervous disease, the effect was, chiefly, through the mind. Inasmuch as there are often shadow sides to such operations, it is to the highest degree essential that they should be resorted to with the greatest circumspection.

I have already spoken in part of utilizing the emotions in therapy. The pleasurable emotions, joy and the like, from whose influences we obtain most benefit, can be aroused by the physician, as a rule, only in the ways already referred to—in giving a favorable prognosis and through cheering words and presence. What should the physician attempt to do with the painful emotions, fear and pain? We have already seen that a fright has suddenly cured hysterical manifestations, paralysis, aphonia and the like, and even attacks of rheumatism and gout.

To some extent we are accustomed to make use of this agency in therapeutics; for instance, strong electrical or other painful applications for the cure of hysterical aphonia or paralysis or to check a hysterical convulsion, and even surgical operations or the threat of the same. But it must be said of this manner of treatment: Fright is like a double-edged sword; it can cut both ways. It can do harm as well as good, and, unfortunately, we cannot usually tell in advance whether the good or ill effect will accrue. Therefore, we must always resort to such measures with great care. My own method has always been, and I believe it is the only right way, to attempt to allay the feeling of fear, to tell the patient the measure is applied because of its curative power (he should never believe it to be a

punishment or a menace), and that the pain will not be nearly so great as it appears. There will still remain sufficient of the element of apprehension, while the expectation of benefit is likely to inhibit the ill, and increase the good, effects of fear.

There is one manner of eliciting fear which is fraught with great danger, to which I wish to call especial attention. Its intention is to remove disease, but the almost invariable effect is to increase it, and bring on new trouble. I refer now to a common habit of telling patients, whose minds are filled with fear or worry or other subjective source of distress, that they must cast these feelings aside or they will have disastrous effects, the disastrous effect usually mentioned being insanity. Now such patients do not really have the power to cast off these torturing feelings at will, and what power they have they are robbed of entirely by the terror these suggested and threatened dangers inspire. And now these new fears ceaselessly prey upon their minds, and not only add to their suffering and prolong the duration of their illness, but enhance the danger of the development of serious mental disease. This suggestion is not only common from the patient's friends and acquaintances among the laity, but is made too often by the nurse. And that is not all, nor would I have dwelt upon the matter in this paper, were it not that I have seen so many cases whose condition was made pitiable in this way, where the suggestions of ill were made by the attending physician.

I wish to add something specially applicable to the diseases in which psychic treatment counts for most, neurasthenia and hysteria. One should always bear in mind as regards these functional nervous troubles that worry about their condition, about the meaning of symptoms, about the disasters menacing them, is usually a constant source of distress to the sufferers, and tends to prolong and aggravate their trouble. It should also be borne in mind that many patients are reticent about much that distresses them; the mental depression, the many morbid fears and obsession, especially the fear of insanity,—common to very

many neurasthenics,—of committing suicide, etc.; and this reticence is likely to be maintained even toward their physician. It is my custom to attempt, so far as possible, to get at what is in the patient's mind, especially what worry and its causes. Then I explain to the patient the nature of neurasthenia, and inform him that such feelings and fears and impulses are very common in this disease, that they do not lead to insanity, and that with improved health all these torturing feelings will leave him. This information takes a great weight off his mind, a large stride toward perfect health. Very often, too, such patients fear that anything they do may not be the right thing, and will do them harm, so that another great burden may be taken off their shoulders by laying out for them a full plan of living, the hours and time of rest and exercise and sleep, the diet, manner of recreation and employment, etc. It is very important, too, to give the neurasthenic an idea of the course of his disease, especially of its many ups and downs, so as to avoid the ill effects of a thousand disappointments, and maintain his courage throughout.

A word more as to the fears and obsessions of these cases. The morbid fears take many forms. A common one is the fear of being in open places, a broad street, an open square, or in closed places, church, theatre, or any crowded place. With the fear there is usually a sense of confusion, of vertigo, of faintness or the like, and the patient generally believes that he would faint, be paralyzed, or even have an attack of epilepsy if he did not make his exit. Giving the patient to understand that all this is merely a nervous sensation, that there is no danger whatever, will be a great relief to him, and in mild cases enable him to conquer his fears. In severer cases it is best for the patient to avoid altogether what arouses great fear, to begin with the conquest of what causes comparatively little anxiety, and by slow steps attempt to gain complete mastering over his fears. In the mean time his nervous system is to be strengthened in all possible ways, while, at the same time,

he may be aided by the suggestion that this remedy or that will help him to gain his self-control.

The obsessions—imperative ideas—are often more difficult to control. One great fear on the patient's mind is that these ideas which cling to him, spite of all that he can do, indicate that he is to become insane, if he be not already so. The assurance that this is a common symptom of nervousness, that it is not a sign of, and does not lead to, insanity, is a great relief to him. In some instances, again, the special impulses are a source of great mental distress. For instance, a woman feels an impulse to kill her child, and the fear that she might do so nearly drives her to distraction. The positive assurance that in cases like hers the impulse never leads to action, lifts her from hell to heaven, and is a great help toward her cure. Bad cases will, of course, need much more than this, but of the special indications in special cases, or of general treatment to strengthen the nervous system, always called for in these instances, I cannot enter into here.

Experience teaches us that sickness often changes the disposition and character. It may make a hero of a coward, or a coward of a hero. The invalid may become the tyrant or the tyrannized. At the same time what influences one favorably, injures the other. A degree of sympathy is a balm to one, while it only suggests gravity of disease and increases the trouble in another. Or a stern harsh word may in the one instance arouse the weakened will power and do good, while in the other the patient believes he is neglected, maltreated or not understood, and the emotional disturbance that ensues only injures him. I mention this in reference to seclusion as a mode of treatment of hysteria and neurasthenia, so popularized since Weir Mitchell introduced his rest-treatment. There is no question of the great value of this mode of treatment, and, at the same time, we need but to look around to see the numerous instances in which it failed, if it did not do harm. This is because cases were not properly selected, because they were not specially studied as to the effect the treatment would have

upon the patient's mind. What I said before was merely to indicate that we must individualize, and never apply such a powerful measure as a routine practice whilst we know that the influences favorable to one are injurious to another. We should study the effect of the patient's surroundings upon him, the influence of his family and friends, with reference to what effects a change would produce. We should study at the same time his disposition and needs. It should not be forgotten that while mental rest is always a chief desideratum in the rest-treatment, in many instances seclusion is not mental rest. It merely gives the patient the opportunity to feed his morbid thoughts and fears. In my own experience failures in the rest treatment have occurred, chiefly, where there was a strong mental element in the case. Often modifications of the treatment will do good where rigid enforcement of seclusion fails.

A few words as to the treatment of a hysterical or hystero-epileptic attack. I have rarely been called to a case of this kind but that the following spectacle was presented: A number of excited people in the room, some bemoaning the patient's condition, others trying to do something, though usually doing more harm than good, in general confusion prevailing, and the patient's condition tending to get worse. Clearing the room of the excitable throng, paying little heed to the patient, or the quiet assurance that the attack is about over, very rarely fails to bring an immediate change and speedy end to the attack. What I wish now to particularly emphasize is the suggestibility of patients in whom consciousness is somewhat blunted. (It is often so to a very high degree in hystero-epileptic attacks.) I have already spoken of suggestion acting in a sub-conscious manner. It has been thought that patients are amenable to suggestion in the early stages of anesthesia from chloroform or ether. The idea I wish to bring forward here is that patients in a condition of stupor or blunted consciousness may also be amenable to suggestion, and be influenced by words spoken in their presence. As in hypnotism, the

suggestion is more powerful than when made to the waking mind, so it may be true in this instance, and, at the same time, nothing be known of the suggestion either by the patient or by the suggester. Whether there is anything in this idea or how much I do not know, but in the treatment of stuporose patients I have, as a matter of caution, formed the habit of telling those at the bedside to say nothing but what might have an encouraging effect while within earshot of the patient.

Finally, a few words on strengthening the will power, so weakened in many cases of hysteria, and, to a less extent, in neurasthenia. Systematic gymnastic exercises, done with vigor and precision; systematic employment; systematically undertaking what is uncomfortable or almost painful—for instance, a cold plunge-bath; trying to hold in check each rising passion; trying to force the direction of one's thoughts, especially if they are flowing in unhealthy channels (the hypochondriac trying to turn his thoughts from bodily functions, the despondent bankrupt from his business transactions and their results, and the causes thereof, etc.), directly exercise and strengthen the will power, while each successful effort in that direction makes future efforts easier. But in many instances this is an exceedingly difficult undertaking, and the patient needs all the help he can get from the advice, the constant watchfulness and guidance, and exhortation, of the physician.

Herewith I close this brief sketch of modes of phychic treatment. I have not spoken of hypnotism, though it has proven in some instances to be a powerful and effective therapeutic agency. But the measure of its usefulness is yet illy defined, its results very uncertain, ill effects not always to be avoided, and it seems to be the consensus of opinion that its practice requires special preparation, and should not become a part of the armamentarium of the general profession. Nor have I spoken of many important agencies in phychic treatment, brain and muscle work, methods of entertaining, amusing, etc., nor of special measures applicable in special diseases,

for this paper has already exceeded its intended length. What I have presented for the largest part will not appear new to many practitioners. But it is not enough that the physician should acknowledge or recognize the propriety of such instruction and the value of such measures; but they should become to him, if I may use an expression apparently so paradoxical in this instance, what Oliver Wendell Holmes termed finger-end knowledge, knowledge always at hand and applicable in the presence of the patient.

Iodide of Potassium as a Diagnostic Agent for Pulmonary Tuberculosis.

Dr. Vetlesen, of Christiania (*L' Abeille Médicale*, November 2, 1897), has used iodide treatment as a means of diagnosis in the case of twenty-seven patients. He administered iodide of potassium in 1.5 per cent. solution, of which he gave three tablespoonfuls per diem. He obtained a positive result in eight of the cases by the end of two or three days. The cough and expectoration increased, and on auscultation sonorous râles could be heard at certain parts of the lungs which had not previously manifested any signs of abnormal condition. In four of the cases the tubercle bacillus was found in the sputum. Dr. Vetlesen considers that the nineteen patients who showed no reaction to the treatment were free from tuberculosis, and in none of these cases could tubercle bacilli be found in the sputum, and none reacted with tuberculine.—*Med. Chronicle*.

Advantages of High Altitudes.

The advantages to be derived from high altitudes, in the treatment of pulmonary tuberculosis in particular, lie in the fact that the air is purer—free from gases and bacteria; that there is a greater amount of ozone in the atmosphere, which is without doubt beneficial; that there is a diminished atmospheric pressure—rarified air; that the rays of the sun are warmer and the air therefore drier—absence of fog; and that these conditions promote a better nutrition, and increase in the red blood corpuscles.—*Clinical Review*.

PUERPERAL GANGRENE.¹

BY MAGNUS A. TATE, M.D.,
CINCINNATI.

Cases of puerperal gangrene are indeed a rarity, and it is with some degree of pleasure that I have the honor of presenting the history of a very unique case to the Cincinnati Obstetrical Society. Gangrene is death of the part *en masse*, and is generally divided into two main varieties, the dry and moist. I shall deal almost exclusively with the dry form.

Dry gangrene is often spoken of as mummification, and gives to the tissues a dried appearance. The watery elements of the blood are carried off; there is a gradual diminution in the arterial supply, while the outflow of venous blood continues unobstructed. The soft structures become smaller, and take on a hard, leathery feel; the skin wrinkles, the temperature of tissue falls, and soon the color changes to a greenish-black hue. The most common example of dry gangrene (generally spoken of as typical) is the so-called senile gangrene. I am unable to find but a few cases where the puerperal state is complicated by gangrene, and I thought it might be of interest I to give a short history of each.

CASE I.

Mrs. G., aged thirty-six, healthy and active. Delivered of her fourth child; lochial and lacteal secretions were natural. On the morning of the fourth day patient had a severe rigor, and when seen her countenance was anxious and distressed, face pale, the eyes sunk and languid, and she was screaming from excruciating pain in the left leg and foot, but referred principally to the upper and inner portion of the calf, which was cold and tense, but not increased in size. This state extended to the foot, on the fore part of which a large spot of ecchymosis appeared, most evident upon the metatarsus and creeping upward to the ankle-joint. The uterus was perceptibly larger than usual.

¹ Read before the Obstetrical Society of Cincinnati, December 9, 1897.

Pulse small and rapid, thirst urgent, tongue dry and coated, some nausea but no vomiting, lochia had ceased and milk scanty. In the evening pulse feeble, tongue parched and of a fiery-red hue, mind sluggish and wandering; the discoloration had reached the rise of the calf of the leg (having a wavy margin) and still advancing. The following morning vesication had begun on the spot first discolored, and patient rapidly sinking. Death put an end to her sufferings early on the fourth day of the disease and the eighth day of delivery.

CASE II.

Patient aged twenty-five. Ten days after delivery with her first child was seized with gangrene of the lower extremities. The gangrene involved the foot and leg nearly to the knee-joint; the patient was greatly exhausted and anxious, but not suffering severely. The limb was amputated at the lower third of the thigh, but not a drop of blood followed the knife. The patient died next day, sinking gradually without suffering.

CASE III.

Patient had previously borne a large family. Last labor was easy, for it came prematurely; child dead-born. On the third or fourth day subsequent to delivery fever supervened, followed by swelling of the left leg, which was attended by great pain and suffering. In the course of two or three days gangrene set in and she died ten days after delivery.

CASE IV.

Patient aged thirty-nine. Pregnancy favorable until within a month of delivery, when she suffered from cough and great debility. Labor, however, was expeditious, lochia small in quantity and the after-pains slight. The woman continued doing well for ten days, when symptoms of pleuritis, with considerable constitutional disturbance, presented themselves. Two or three days after her recovery from the pleuritic attack she complained of pain in the heel, passing from thence to the great toe and ankle-joint. Pain was treated as neuralgic, but with no good result. At

length a livid spot appeared on one of the toes. The temperature of the foot and leg gradually diminished, and there was an impaired sensibility. The toes severally became black, and this appearance extended so as to involve the foot and ankle. The line of demarcation formed about two inches about the ankle-joint, and amputation practiced above knee. Recovery complete, and she bore two children since the occurrence of the attack of puerperal gangrene.

The above four cases were taken from Simpson's work on obstetrics.

CASE V.

Swayne (Transactions of the Obstetrical Society of London, 1884) relates a case occurring during the seventh month of pregnancy. The disease came on after a long journey, and attacked the integuments and muscles over a space of the size of a man's fist on the upper and inner third of the right thigh. The symptoms had existed about four days before the occurrence of premature labor, but were not very severe until after delivery, when they became much intensified and proved fatal early on the third day. There was no injury, wound or erysipelatous inflammation to account for the occurrence.

CASE VI.

Patient aged twenty-five, primipara. Previous history: Had had typhoid fever three years ago; since that time perfectly healthy. Height five feet and six inches, weight 165 pounds. No history or appearance of any syphilitic lesion. Family history negative. Pregnant six months and a half when first taken sick at her home in Springfield, Ohio, and the following is as correct and detailed a history as I was able to secure:

August 9, 1897. Patient took a bath, caught cold and from that time her sickness began.

August 10. Patient described her condition as being so nervous all day that she felt like crying.

August 11. Early in the morning noticed an edematous condition under the eyes and of the feet, and later in the day (the edema increasing constantly) the abdomen began to swell

and her breathing became somewhat labored. Headache was intense. Under the care of her family physician the swelling subsided, and she seemed to improve greatly in the next few days.

August 20. Woke up with a violent headache, and before a physician could be summoned she had a convulsive seizure, this in turn followed by a second, and this again by a third attack, which was longer and more intense than the other two. During the third attack patient bit her tongue and quite a hemorrhage followed. We can readily imagine what a horrible and ghastly sight she presented. Vomited freely before and after each convulsion.

August 25. Patient was brought to Cincinnati and placed in the Jewish Hospital. At this time her breathing was so labored she could not lie down, and rest had to be secured by hypodermics of morphia, which she stated were given to her very freely.

August 27-28. The dyspnea rapidly disappeared and her general condition greatly improved.

August 30. The swelling from the abdomen had nearly all disappeared and there was no perceptible trace under the eyes. In the evening she complained of pain in the abdomen, which came on regularly and increased in frequency, and the following morning, September 1, she gave birth to about a seven-and-a-half months' dead child. Patient had nearly a painless birth.

September 2. Complained of a sleepy feeling in the left foot, with some pain, which subsided towards evening, and on the following day she was very comfortable and entirely free from pain.

September 9. The right foot began to have a sleepy feeling in it, which in turn (within a few hours) was followed by the left, and in the evening a bluish patch appeared on each ankle. She complained bitterly of pain in the feet and ankles. The bluish discoloration spread rapidly up the legs. Patient left hospital and I was called to see her. Upon examination I found that the gangrenous condition involved both feet and legs nearly to the knees, having a wavy outline in front and ex-

tending up to the popliteal region posteriorly. There was no line of demarcation present. The feet were turned in, and had a greenish-black, dry, and a somewhat leathery appearance. To the touch they were cold and clammy (as if the feet and legs had been encased in ice); the skin wrinkled, and one spot of vesication on the right leg posteriorly and two on the left. I was unable to detect any pulsation in the feet, and her description that they had a numb, woody feel seemed to me very applicable. The legs above the knees were warm, but the pulsation of the femoral artery could not be detected. No dyspnea was present; breathing was regular; no heart murmur, but a slight irregularity in beat, ranging from 100 to 120 per minute; the mind clear and patient perfectly rational. Bowels were constipated and urine loaded with albumen. Pain in the feet and legs seemed almost unbearable at times.

September 20. For the first time any fever, her temperature being 100° , no doubt due to infection, and towards evening there was a perceptible odor of dead tissue.

September 21. Temperature 103° .

September 22. Temperature 104° in the morning, and patient died the following morning at 2 A.M. Her mind remained perfectly clear until twenty-four hours before death. A few hours before death there was a marked disintegration of tissue; a large slough appeared on the left leg posteriorly, and another one on the right leg more posteriorly and to the inside. At no time was there any evidence of a line of demarcation. A complication which she complained of at nearly every visit was two huge bed-sores, they developing very early, about the seventh day after confinement. We find that patient was confined September 1, 1897. Bed-sores developed in seven days, gangrenous patches in nine days, and death twenty-three days after confinement. The following physicians saw the case with me: Drs. Bramble, Kiely, Taylor and Ransohoff.

ETIOLOGY.

In the typical senile gangrene we

have a calcareous condition of the arteries and a disturbance in function of the vaso-motor nerves, the circulation in an extremity being much impaired. The long continuance of ergot has produced sloughing, an example being gangrene of the big toe. This drug is supposed to act by keeping up arterial spasm. Independently of any disturbance of the circulation, we may have destruction of the cells of the soft structures. The tissues of the body at large may be in an impaired condition from long-continued fevers or in individuals suffering with diabetes. Gangrene has resulted from injuries, undue pressure, inflammatory swelling, intense heat or the reverse, and also in parts deprived of their nerve supply. The tissues in dry gangrene are not invaded by microbes, and therefore become mummified, producing slight or no constitutional disturbances, but when the tissues break down the staphylococcus and streptococcus find a fertile soil. My case was a typical example of this.

Wm. Hunt, after a thorough investigation, claims that diabetic coma holds second place to traumatic gangrene, including those from frost-bite, burns and scalds.

Many have cultivated various forms of bacteria, but Rosenbach found a peculiar spore-bearing bacillus, which for a time played an important rôle in the causation.

Koch, experimenting with the field mouse, produced a progressive gangrene from inoculation with chain micrococci.

Double infection of gangrene and tetanus may occur, while septic infection is rarely or never seen with gangrene, and may be explained by microbic antagonism.

Senn (Transactions of the American Medical Association in 1888) says gangrene resulting from mycosis of tissues is caused by one of three well defined conditions:

1. The microbes are so numerous in the capillary vessels that their presence interferes mechanically with the blood supply, and death of the part ensues in consequence of greatly diminished or suspended nutrition.

2. The microbes in the tissues pro-

duce ptomaines which destroy the tissue by their direct destructive action on the protoplasm of the cells.

3. The specific inflammation caused by the microbic infection is so intense that the inflammatory products in the para-vascular tissues accumulate so rapidly, and in such abundance, that nutrition is suspended by impairment or suspension of the arterial supply, or mechanical interference with the venous return of the blood from the part, or both of these conditions combined. For these reasons no one variety of microbes can be the sole cause of gangrene.

TREATMENT.

We may divide the treatment into the prophylactic, medical and surgical.

1. *Prophylactic*.—Remove all causes which may favor the development of gangrene and adopt measures to promote circulation.

2. *Medical*.—Try to establish collateral circulation. We may practice moderate elevation of the limb if that be the part affected. Disinfect the part; try to keep it dry, odorless and warm. If it be an extremity we may wrap the part in cotton or wool. The patient may suffer excruciating pain; if so, there is no alternative but the free use of morphia. We may try to build up the system; put the patient on a nutritious diet, milk being preferable, and do not let the bowels clog. Alorossoff gives the history of two cases of the extremities where galvanism gave excellent results. In one of the cases amputation was performed, but the gangrene was not arrested until galvanism was tried.

3. *Surgical*.—Naturally amputation is the only safeguard, but it is a wise physician who knows when to amputate, and few care to use the knife upon an almost hopeless case, and duty must be backed by a courageous heart. If we can discover pulsation of the main artery in the limb amputation should be at the point at which pulsation is detected, and never amputate low down. If our patient be an elderly person or the cause be diabetes it is a hopeless case, and amputation should not be practiced.

[FOR DISCUSSION SEE NEXT COLUMN.]

Society Reports.

OBSTETRICAL SOCIETY OF CINCINNATI.

OFFICIAL REPORT.

Meeting of December 9, 1897.

The President, C. L. BONIFIELD, M.D.,
in the Chair.

E. S. McKEE, M.D., Secretary.

DR. M. A. TATE read a paper entitled

Puerperal Gangrene (see p. 502).

DISCUSSION.

DR. GILES MITCHELL: I have nothing to add only to say that I had the privilege of seeing a case of puerperal gangrene in the practice of Dr. Reamy some fifteen or eighteen years ago. It was a case of gangrene which developed nine or ten days after delivery, the result of phlebitis of the right leg, phlegmasia alba dolens. The case was not altogether one of dry gangrene. At first it was apparently dry, but in a short time the line of demarcation was present. The patient survived to the fifteenth or eighteenth day. My recollection is that no examination of the urine was made. The patient was apparently a strong, healthy woman of about thirty-five, and this was her third or fourth labor.

DR. W. D. PORTER: I would just like to ask why this is called *puerperal* gangrene, and whether there is any connection between the puerperium and the gangrene. As far as I could learn from the paper there is no connection, and therefore I cannot understand why it should be called puerperal gangrene any more than an attack of pneumonia following labor should be called puerperal pneumonia.

DR. G. B. ORR: I have not very much to say. I want to compliment the author. It is a very interesting paper. There are two or three points that interest us most. First, as to what may have been the cause of the gangrene. It may have been due to thrombosis or embolism, or the albuminuria of preg-

nancy, as in this case; it is well known that gangrene often follows Bright's disease. Indeed, gangrene is one of the not uncommon accompaniments of Bright's disease. The case reported is to be traced, I suppose, almost certainly, from the doctor's description, to the kidney trouble. I have had cases myself, not in the puerperium, but in kidney disease. I have made an amputation, but the disease recurs. The only thing you do by amputation is to make the patient more comfortable and possibly prolong life. For a time there may be an abeyance of the progress.

DR. C. D. PALMER: Doctor, do you amputate above the thrombotic place?

DR. ORR: Yes.

DR. PALMER: Then how do you explain the repetition?

DR. ORR: It is due to the kidney trouble.

DR. PALMER: I would like to have a little attention devoted to a question I think Dr. Porter presented, *i.e.*, is there anything in the condition of pregnant women or in the puerperal state conducive to puerperal gangrene? I think there is. It is a well-known fact that in pregnancy the blood-changes are peculiar. We may say pregnancy is a physiological condition; we may say that the blood-changes incident to pregnancy are physiological, and so they are no doubt, yet at the same time there are changes there that border on the pathological. There is a diminution of the red blood corpuscles, a relative increase of the white blood corpuscles, and an increase of the fibrinous elements—a hydremia and a hyperinosis. That condition is found, also, following other conditions and diseases. Thus, it may be found in the convalescence of typhoid fever and other acute diseases. No doubt the blood-change is a predisposing cause, and there ensues an embolism or thrombosis. A gangrene in a lower extremity, in the puerperal state and other conditions, differs from phlegmasia alba dolens in that the trouble there is venous, whereas here it is arterial. The exciting cause may be some material thrown out from disease of the heart or the vessels, or there may be spontaneous coagulation, and the coagula is carried along until it

comes to a small vessel beyond which it cannot pass. I believe, also, that active predisposing causes of this condition are loss of blood and sepsis. It is well known that this condition follows in women who have lost considerable blood, as from placenta previa.

DR. PORTER: I would like to ask, if this is true, why is the disease so remarkably rare in pregnancy? I understood the essayist to say it is very rare, and he quoted but the very few cases he has been able to find.

DR. THAD. A. REAMY: I would like to ask Dr. Palmer whether or not he thinks the enormous increase in the relative proportion of the white corpuscles prevents the white corpuscles from keeping on the outside of the arterial lumen—that is, next the vessel wall—and the red blood corpuscles running in the centre of the stream, as they do normally. May not the white corpuscles drift in the current with the red blood corpuscles and there be prevented proper oxidation of the tissues?

DR. PALMER: As I understand the condition, there is an increase of the white blood corpuscles, which is both relative and absolute, and the increase of the watery elements is relative and absolute. I cannot answer the question further.

Gonorrhea as a Cause of Pelvic Disease.

Dr. Madden (*Lancet*) recorded by Dr. Chase in the *Brooklyn Medical Journal* for October, 1896, after speaking of the invasion of gonococci into the uterus, Fallopian tubes, etc., concludes as follows:

With reference to the other intra-pelvic complaints of which gonorrhea is a fertile source, I shall only here observe that long clinical experience has convinced me that in a large proportion of instances, peri-uterine phlegmon, or in other words, all those chronic inflammatory lesions of the pelvic serous and connective tissues formerly included in the term pelvic cellulitis, and subsequently better known as perimetritis and parametritis, may be found traceable to that affection.

Translations.

PARISIAN MEDICAL CHITCHAT.

BY T. C. M.

The Operation on the Divine Sarah—Blisters in Pneumonia—The Sultan's Eunuch—Divorce Statistics of Europe—Some Great Men's Peculiarities—The Infirmities of Modern Fiction—A French Prescription for a Delayed Birth.

After the trial of Zola, in the now celebrated Dreyfus case, the surgical operation on the Divine Sarah was the most important event of the season. Nothing has been more discussed in medical circles than the affliction of the beautiful Jewish actress. Sarah had a cyst, and wished, like many another actress, to be laparotomized. This assertion was at first met with incredulity; some believed that the *artiste* wished to take a lesson in the thing to the better awake the applause of theatre-goers in some new dramatic creation; others (scandal-mongers) claimed that she was burning up with a desire to renew her acquaintance with Dr. Pozzi, the earliest *friend* of her youth. Meantime it was certain that Sarah had an abdominal tumor. The following account of the operation has been published in the daily Parisian press:

Madam Sarah Bernhardt has suffered for some time from a large abdominal cyst. The violent movements the *artiste* was forced to undergo in her rôle in the "*Mauvais Bergers*," in which she is obliged to fall down roughly face forward, aggravated her malady. Lately Dr. Pozzi, who was in attendance on the tragedienne, insisted that an operation was indispensable, and that it was necessary to perform it without further delay. To prepare herself by a period of absolute repose, Madam Sarah Bernhardt entered a private hospital near the Arc de Triomphe, where none but her immediate family were permitted to visit her. The operation was made shortly afterwards by the Senator, Dr. Pozzi, Professor of the Faculty of Medi-

cine, and Dr. Obissier. The patient gave full proof of her resolute energy. Ordinarily the patient is carried into the operating-room under the influence of an anesthetic, but she walked there, supported on the arm of Dr. Pozzi, and would only consent to be anesthetized after the repeated coaxings of her medical attendants. The operation lasted one hour, and was a complete success. She slept untroubled by all that passed, and without experiencing the least pain. The doctor performed a complete ablation of a large intra-ligamentary cyst.

On awakening, Madam Sarah gave a full proof of her coolness. Her condition was excellent, and no complication is feared. After a month she will return to her work fully cured.

* * *

As stated before in the LANCET-CLINIC, the struggle, *pro* and *con*, as regards the use of fly-blisters, still enjoys the attention of old and young clinicians at the Academy of Medicine. One side, with Robin, Hervieux and Ferrand, laud the usage of the ancient cantharidal revulsive, while on the other side Dr. Huchard and his friends consider blisters as useless and dangerous.

To Huchard's mind blisters are injurious in cases of phthisis and pneumonia; he insists that the latter malady should be treated by cold baths.

Between such divergent opinions, how will the general practitioner be able to decide?

Yet we must not forget that there exists between differing doctors a no less interested being, *i.e.*, the patient.

Not many patient's desire blisters, and will not have cold baths. During the pneumonia epidemic of 1890-91, I have often heard it remarked by inconsolable families that their father was dead because the dampfool doctor would not use blisters.

What will patients think after reading these hot medical discussions in the Academy, the controversies that denote the growing instability of modern therapeutics? They would most sincerely desire that medical controversies should be held behind closed doors.

A Belgian physician, celebrated for the bitter war he has made on all Pas-

teurism, the well-known Dr. Herbert Boem, expresses the general opinion of old and experienced physicians upon blisters in pneumonia.

"Pneumonia has been a common winter complaint of all humanity since the beginning of time. Only microbiological Frenchmen add to the word pneumonia the qualificative infection, making out that they have discovered a new disease. It is as if they had discovered that the sun gives light. In fact, all pneumonias, like bronchitis and enteritis, are inflammations of the mucous membranes, that engender pathological secretions or stir up organic detritus; pus, lympho-microbes, bacilli and other infecting products that the body expels, and which are infectious and contagious at the same time. Then all pneumonias are infectious, and Pasteurian medicine has discovered nothing new in this respect.

"But it is noticeable that, infectious or not, *pneumonia is habitually fatal* to-day in France. Modern school doctors cannot cure it. The majority of distinguished men in science, letters and politics succumb rapidly to this vulgar affection. If it is thus in the rich and fashionable world, what becomes of the poor devils of society? Dr. Robin may well claim that he has rightly endeavored to oppose the homicidal therapeutics of the Pasteurian school by the rational therapeutics of antique Hippocratic medicine; he *treats and cures* pneumonia, no matter how infectious it becomes, by bleeding, leeches, cups, blisters, emetics, purgatives, expectorants. He is a believer still in tartar emetic, ipecacuanha, etc."

However, if fashionable society prefers the doctor of the microbial school, let them go and slumber in the graveyard, the victims of the latest fad in therapeutics. Let them die a serotherapy death if they so desire! It is to be trusted their surviving progeny will learn in time that experience in general practice is much better than the teaching of modern schools.

The Sultan's head eunuch died a few days since. His name was Mehemed Izzet. He was aged seventy-five years,

and his demise is much regretted by the inmates of the harem. Mehemed Izzet was born in the Egyptian Soudan, and was attached to the seraglio at the age of fourteen years. In 1879 the Sultan recompensed his zeal by putting him at the head of the important service of the harems, which were directed by Mehemed Izzet for twenty-seven years, despite the changes in sovereigns.

Mehemed Izzet amassed an immense fortune, that now goes back to the present Sultan, for in Turkey all the fortunes amassed by the palace functionaries revert to the ruler of the land. After Mehemed Izzet's death his body was examined and some most magnificent jewels were found under the head-eunuch's arm-pits.

* * *

Where polygamy exists there is no divorce, and speaking of divorce reminds us that a late writer in the *Memorial de la librairie* has published some late statistics on this subject.

In Germany divorce laws were established in the Empire by the law of February 6, 1875. The mean annual number of demands for divorce from 7,983 for 1881 to 1893, has increased to 10,215 in 1895, an augmentation of 28 per 1,000.

In England divorce is regulated by the law of August 28, 1857. From 1858 to 1862, 205 was the average English demand; in 1894 there were 547 demands, an increase of 167 per 1,000.

In Austria, among the non-Catholic, who alone have the right to demand divorce, in five years, from 1890 to 1894, the increase was 25 per 1,000.

In Belgium, from 1891 to 1895 only, the number of demands for divorce was raised from 594 to 708.

In Denmark, from 1875 to 1884, there were 206 divorces and 400 separations.

In France, since the law of July 27, 1884, there have been 62,166 divorces. The annual average has been regularly raised from 4,123 in 1885 to 7,983 in 1894, or 91 per 1,000 increase. Separations that tended to diminish under the law, have lately increased again.

In Italy divorce does not exist, but

separations, from 1,495 in 1895, have increased 17 per 1,000.

In Holland from 14 per 1,000 in 1895, since then 47.

In Roumania, where there are no separations but all divorces, 1,127 asked divorces in 1887, and 1,503 in 1891.

In Russia, from 1867 to 1886, the increase in the number of divorces has been 37 per 1,000.

In Sweden in 1890, there were 296 divorces; and in 1891, 292.

In Switzerland divorce is regulated by the law of December 27, 1874. There were 677 divorces in 1891 and 897 in 1895.

From these figures it is easy to see that almost everywhere, save in England, the tendency to break matrimonial ties is greatly increasing from year to year.

Here is a comparative table of divorces for each 1,000 marriages:

Germany (1889-1893).....	17.0
England (1890-1894).....	1.6
Austria (1890-1894).....	4.8
Belgium (1891-1895).....	11.0
Denmark (1875-1884).....	13.0
France (1890-1894).....	21.0
Italy (1890-1894).....	2.8
Holland (1891-1895).....	12.0
Roumania (1887-1891)	20.0
Russia (1882-1886).....	1.7
Sweden (1890-1894).....	10.6
Switzerland (1891-1895).....	40.0

In America, the paradise of divorced people, judging from New York, Chicago, St. Louis, Cincinnati and Boston papers, the divorce germ is devastating modern society. Education in non-religious schools seems to be at the root of the evil in America. The English, Catholic and Greek churches have fewer divorces than all the other religions combined. Divorce in France is almost all among the Protestant and non-sectarian members of society. In England, especially, the ritual of the Episcopal Church, "Whom God hath joined together let no man put asunder," seems to make contracting parties live together. Divorce is the most palpable sign of national degeneration. It would seem that in polygamous countries there is more respect for social morality than in many of the modern so-called civilized States. In America, especially, if the

statistics of various states as regards divorce are analyzed, the growing tendency to what is next to Mormonism is more than evidenced. It would be well for some American writer to fully analyze these figures and the causes assigned for the granting of divorces. Perhaps there are underlying evils that might possibly be corrected by national legislation only. Divorce in America seems to be governed by parallels of latitude. There are few divorces in Southern States; in some Eastern and North-Eastern States the mean average divorce rate appears enormous.

* * *

An erudite author has lately written up the peculiarities of men:

The Prince of Wales winks his left eye when speaking. Prince Edward, his son, always puts one finger under the chin while conversing.

The Emperor of Austria always brushes his whiskers with his hand.

The Czar of Russia places his hand on top of his head.

The Khedive of Egypt continually moves his left leg.

The Archduchess Marie Therese of Austria cannot converse without pulling on a small steel buckle she wears above the left hip.

Some distinguished personages in the past seem to have had to make automatic gestures of some kind to facilitate their speech. Thus Pompey always rubbed his forehead with his little finger. Cicero picked his nose with his index finger. Mirabeau always pulled away on the folds of his pocket. Robespierre always beat a tattoo with his fingers on the table.

This is a curious study. Look around among your friends and closely observe them. You will be astonished to find so many of them who must make an automatic gesture while talking.

* * *

In a late French romance appears a prodigious paragraph that contrasts all the infirmities of modern fiction:

"Despite his *lame* reasoning to excess, Paul de Tresnile, standing, his darkened lantern in his hand, always sustained by a *blind* faith, but, despite this, a prey to a *dumb* pain."

Poor Paul de Tresnile! There is a hero for novel-reading maidens. *Lame, blind, dumb!* Wonder if he had rheumatism, too?

* * *

A new French story, but perhaps an American chestnut:

Madame Destunnelo, pregnant for over nine months, retarded delivery. "My son is very long coming," she remarks to her friend.

Her friend replies: "My dear, if this keeps on you will have to swallow a tutor for him."

Medical and Surgical Treatment of Harelip.

Mumford (*Boston Med. and Surg. Journal*, March 3, 1898) states that the important points in the treatment of harelip include the following considerations:

1. Harelip babies are not necessarily feeble at birth, and by proper feeding can be kept up to the normal standard.
2. Keep the field clean with aseptic washes before the operation.
3. Operate in the sixth to the eighth week.
4. Do not slash with scissors, but cut and trim carefully with a knife.
5. Free the upper lip thoroughly from the jaw.
6. Anchor the nares with shotted wire.
7. Use no pins or heavy outside sutures.
8. Use *crepe lisse*, not surgeon's plaster.
9. Leave the heavy inside stitches for six days.
10. After operation give especial attention to the care of the bowels and to proper feeding, as on this very often hangs the whole success of the operation.

VARALETTES.—This is the name given by the London house of Alfred Bishop & Sons, Ltd., to their compressed effervescent tablets. The house is an old and well-known one. We learn that it was among the first to make effervescent tablets, and that its products have always been regarded as unexcelled.—*N. Y. Med. Journal*, April 23, 1898.

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CINCINNATI, MAY 14, 1898.

Editorial.

MEDICAL WAR MEASURES.

Ever since the controversy between this country and Spain became so involved that the severance of diplomatic relations was looked upon as inevitable, even before actual hostilities commenced, medical journals and medical writers have been exercised as to the probable fate of an American army in Cuba; not from the standpoint of the soldier, but purely from that of the physician, the scientist, and the humanitarian. All recognize that the greatest danger to our armies would be not from Spanish bullets, especially if they are no better shots with rifles than they have so far proved themselves with heavy artillery, but from the diseases peculiarly deadly to the unacclimated—yellow fever, small-pox and malaria in its malignant forms. To these dangers must also be added typhoid fever and dysentery. As shown by Woodward's reports, in the Federal army alone there were over a quarter of a million cases of acute dysentery; in addition to this, chronic dysentery and other chronic diarrheas

incapacitated over two hundred thousand and more. In the Confederate army, accustomed as they were to the climate, for most of the fighting occurred on Southern soil, fully as many more either perished or were placed *hors de combat* from the same causes." With our more correct knowledge of this disease, however, this large number of cases would be materially decreased as regards percentage. Many of these writers seemed worried, strange as it may seem, that so great a scientist as Surgeon-General Sternberg would not be alive as to the facts, and would allow a large army of unprotected men, medically speaking, to invade the island without protest on his part. The fact that has leaked out this week that but four thousand troops from the regular army, men who cannot but be looked upon both from a military standpoint and from the very nature of their physical training as the very best material available, will occupy Cuban territory before fall—that is to say, when the scourges of the tropics have to some extent diminished in virulence—proves conclusively that those in command have not only conferred with the Surgeon-General on this point, but have likewise followed his advice. That the advent of fall will not remove all danger, and that the army surgeon will still have much to guard against, we can readily see when we take into consideration the infective areas as laid down by Guiteras, than whom no one is more entitled to give opinion: "(1) The focal zone in which the disease is never absent, including Havana, Vera Cruz, Rio, and other Spanish-American ports; (2) peri-focal zone or region of periodic epidemics, including the reports of the tropical Atlantic in America and Africa; (3) the zone of accidental epidemics, between the parallels of 45° north and 35° south latitude."

Our experience of last fall demonstrated only too well how easy it is for yellow fever to gain a foothold in this country, even in time of peace, with limitation of movement between Cuban and American harbors, and while great precautions were being exercised to prevent its entrance. Again, we saw with what comparative ease it resisted the most heroic efforts to stamp it out. To be sure, not so many were infected as in former visitations to our shores, and to this beneficent result we must give physicians and sanitary science due credit, while not forgetting that experts classed the epidemic as one comparatively mild. In war time, with the constant interchange of soldiers and munitions of war between the two countries, the same rigid system of isolation and disinfection cannot be carried out, and this dread disease almost of a certainty will again enact the rôle of "the unwelcome guest." In such a contingency, the physician at home will be able to serve his country's interests just as much as his brother in active service in the field, whose principal anxiety will not be the mere care of the sick and wounded, but the onslaughts of an affection that would work more demoralization in an army than a disastrous defeat. For those of us at home our predecessors have mapped out our line of conduct. What can be done in the way of protection in the camp?

The opportune discovery of the specific microbe of yellow fever, followed later by that of its antitoxine, points out one method of procedure, that of protective inoculation. This at the best would but be in the nature of an experiment, and, to say the least, it would be rather heartless to pin our faith to a method which practical usage might prove entirely inadequate. Possibly the best that can possibly be done is the

strictest attention to sanitary details. Troops not acclimated should as far as it is possible camp upon high ground. Hospitals especially should occupy the highest altitude consistent with convenient distance from the general encampment. The subject of drinking water becomes a most important question. All writers unite in advising the boiling of water used for such a purpose, not so much to guard against the disease under consideration as other of the infectious diseases, malaria and typhoid. These writers would confer an inestimable boon on humanity if they would go more into details as to how this desirable end is to be encompassed. Suggestions that each soldier carry in his knapsack a rubber funnel and a supply of filter paper might be of some purpose could we persuade our better judgment that the soldiers would make use of such implements. Among the impedimenta to light marching order, these would be among the first to go. A point to which the greatest attention should be given is the general health of the original material with which we have to deal. Surely, out of the immense number anxious to engage in the present difficulty it should not be a difficult matter to select one hundred and twenty-five thousand men whose average standard of health is near the normal. Let the greatest care be used in examining into the physical qualifications of all volunteers, for, according to our present knowledge of disease, infection is derived in two ways—the individual is “predisposed” to a certain malady, or his resisting power (to any infection) is below par.

Now as to the question of selection of troops, and this appears to the writer to be one of vital interest. Within the past week the son of a very distinguished General of the late war succeeded in

enrolling a full regiment of able-bodied men, all of whom had had yellow fever, and consequently for whom this disease has been robbed of its terrors. Through the Senator from Louisiana the services of this regiment were offered to the government. It is estimated that there are in the South forty to fifty thousand men, exclusive of the negro population, able to bear arms, who are similarly freed from an attack of yellow fever. Surely, an army of ten thousand such men would be of more value in Cuba than a force many times that numerical strength of the unacclimated. Many of these men are eager to volunteer their services; the offer of a somewhat increased pay or other emolument would decide many more, while the very knowledge that the country needs them would be sufficient cause for others. There is a section in the constitution (46) that empowers the President to organize companies, troops, battalions or regiments possessing “special qualifications” not to exceed three thousand. This latter clause, referring to number, could no doubt be easily remedied. The main objection to the plan is its unfairness, in that the burden of the war would be thrown upon the Southern States. Nevertheless, it is one manner of solving this important problem, and the proper solution can only be reached by earnest study on all sides. An army of ten thousand immunes, the present army of Cuba equipped with modern arms, together with a portion of our own regulars, ought to make a determined stand against any force Spain could send against them. M. A. B.

THE city of Bloomington, Ill., has been left, by the will of Ex-Chief Justice John Scott, of that city, a \$2,000,000 bequest for the purpose of founding and maintaining a hospital there.

MEDICAL DEPARTMENT, U. S. A.

The atmosphere is literally saturated with conditions of war. Physicians are naturally interested in that which particularly pertains to their own corps in military service. The Surgeon-General, Dr. George M. Sternberg, is one of the foremost of medical men as a scientist and author; nor is this all—he is every inch a soldier, and in no sense a martinet. His ideas of discipline are in accord with that which belongs to the conduct of a corps of men who have a superior general and special education; hence, a complete absence of offensive mannerisms. In company with physicians he is plainly one of them—nothing more, nothing less. This year he is President of the American Medical Association.

In making additions to the medical staff, the President has done wisely in giving a number of promotions to those who have been identified with the regular army staff. This has been supplemented by appointment of two from civil life to position of Deputy-Surgeon General, with rank of Lieutenant-Colonel, one of whom is Dr. Nicolas Senn, of Chicago, who was last year President of the American Medical Association. Every physician in the world who knows aught of the literature of his profession knows of the high scientific work of Dr. Senn. As a teacher of surgery he is well known as professor in Rush Medical College. His practice for several years has been extensive and lucrative.

Dr. Senn has a passion for arms and a military life. For several years he was Surgeon-General of the Wisconsin State troops, and has lately been Surgeon-General of the Illinois National Guard. These tastes and duties have made him familiar with army require-

ments, and the National Government is fortunate indeed in being able to secure his very valuable services.

The personnel of the Navy Medical Department has lately been greatly improved through a granting of equal rights to the staff with officers of the line. For many years there have been such antagonisms between these branches of the service as to prevent the filling of the corps of assistant surgeons. Without going into particulars, it may be said President McKinley has severed the Gordian knot and peace has been declared by a formal recognition of equal rights between the staff and line officers of the navy.

In response to a toast at a recent meeting of the Loyal Legion in this city (the Loyal Legion is composed of those who were commissioned officers in the late war of the rebellion), Dr. P. S. Connor took occasion to show that the medical staff of the army, although recognized as non-combatants, were exposed to more and greater dangers to life and health than were the officers of any other of the staff corps, such as adjutant-generals, commissary and quartermaster officers, paymasters, engineer and ordnance officers; that in the war of the rebellion the losses of medical officers among the killed, wounded and from sickness was disproportionately large. He spoke of their personal courage in times of danger and acts of heroism, and of inspection of small-pox hospital wards by general officers who had bravely faced death in line of battle, but quailed and retreated from the presence of contagious disease. This was true as witnessed by the doctor, and on more than one occasion as observed by the writer. This was due to the education and special training of the men. In one case there was a familiarity with death

and wounds from deadly leaden and iron missiles, which made them undaunted by fear; in the other instance the doctors knew and dealt with the equally deadly foe, that held his forces intact behind masked batteries, shelling the army with deadly microbes and bacilli.

The casualties of battle also are likely to strike members of the medical corps, as shown by a killing of eighty-four medical officers in the field during the war of the rebellion. This was in the Union army alone, to say nothing of the scores and even hundreds who yielded up their lives because of exposures and deadly disease contracted in the service. It is with pleasure the statement is made that in no known instance in time of war did any medical officer exhibit any symptoms of cowardice, either in the presence of leaden hail or contagious disease germs.

BANQUET OF THE SOCIETY OF EX-INTERNES OF THE CINCINNATI HOSPITAL.

The third annual banquet of the Society of Ex-Internes of the Cincinnati Hospital took place on the evening of May 2, at the Grand Hotel. The session opened with the reading of minutes of the last meeting, followed by reports of committees. The election of officers for the ensuing year then took place. Drs. John A. Murphy and Albert Freiberg were retained in their places of President and Secretary, respectively; Dr. John Landis, Vice-President; Dr. John Oliver, Treasurer. This election took less time, in fact, than it takes to tell it, for the protests of empty stomachs could not be passed unheeded. We still had time on the way to the banquet-room to defeat a measure brought up for the purpose of allowing practitioners in good standing to be the guests of the society at our annual banquet. After a long silence, broken only by the clatter of knives and forks, the inner man admitted himself satisfied for the nonce, so we turned our attention from one specialty to another, that of Twitchell to the Langdonian disquisition. It

was a distinctly Hibernian *séance*. At the foot of the U-shaped table sat our honored President, Dr. John A. Murphy; on his right, Dr. Ellen McCarthy, the only representative of womanhood who has ever gained the distinction of interne service at the City Hospital; while upon the left, genial and smiling, sat he whose duty it was to stir the speakers of the evening by his eloquence into wild tirades of specialistic joy, the F. O. I. G. Pan-Specialist, Dr. W. E. Kiely—all three Irish. And with true native wit did he hold them up in their old colors.

The intellectual feast was ushered in by the President of the Academy of Medicine, class of '82, number five, as he called himself. He exercised the right of the "toast" by almost ignoring "The Future of the Academy" in reminiscences of his experience, which was the more appreciated as all internes before and since have gone through nearly the same.

The ophthalmologist was next accorded the privilege of the floor in the person of Dr. O. B. Dunn, who whispered words of love upon "The Eye and Its Cosmic Relationship."

Neurology, not to be outdone, next plead its cause in the person of that great "Hospital Neuron," Dr. F. W. Langdon. His classification of the aspiring young medics who seek fame and fortune through the doors of a great hospital charity left nothing to be desired—except holes for some of us in which to retire.

"Nature's Mistake, the Stomach." Something had evidently disagreed with Dr. G. B. Twitchell, possibly his own digestive canal, that the committee should slander such and so great an organ, though his friend on his left had told him it resembled a bag-pipe, that they had all assembled that night in that very room for no other purpose than to abuse the subject of his toast.

The oldest soldier of them all was then introduced and eulogized the old sod in his response, "A Rare Old Irish Specialty," with his usual enthusiasm.

The President here announced the Executive Committee for the ensuing year: Dr. A. I. Carson, Julius Eichberg and Mark A. Brown.

The last regular speech of the evening was an address by Dr. J. C. Oliver, entitled "Voodooism." The speaker described in a humorous way his well-known reputation as a man of serious, studious habit. Once upon a time he was asked to respond to a toast and instructed to be sure to make it funny. He prepared what he considered a model of bright

and scintillating wit. But either that his audience had not been educated to true humor, or had derived their ideas from the horse-play of the stage or "Peck's Bad Boy," no one laughed, to his amazement and disgust. Indeed, it was intimated that he could more acceptably enact the rôle of pall-bearer. His present audience was more alive to the situation, and the address was highly appreciated.

The suggestion of the toast-master, that the society would be pleased to hear from the only lady gracing the occasion was received with applause. Dr. McCarthy's reply was brief and to the point. "I think the gentlemen's wives will be expecting them home," she said, and with a furtive, almost unanimous, glance at their watches this pleasantest of medical meetings adjourned for the year. M. A. B.

DR. MARIETTA HATFIELD.—It is with much regret that we learn of the massacre of the doctor at Rotofunk, Sierra Leone, Africa. Dr. Hatfield was a graduate of the Cincinnati Woman's Medical College. Dr. Archibald, another female physician, also suffered death in the same manner at the same place. They were missionaries of the United Brethren Church.

THE STREPTOCOCCUS GERM.—Much new and instructive literature concerning this microbe is being sent out, especially through the foreign medical journals, and it seems to be only a question of time when the germ and the diseases caused by it will be spoken of as frequently and familiarly as the Klebs-Löffler bacillus. Indeed, it seems likely that it will surpass this germ in importance, for while the Klebs-Löffler bacillus only produces one disease, the streptococcus is responsible for several. Among them might be mentioned puerperal septicemia, erysipelas, phlegmon and probably many suppurative conditions not yet understood. It is a great satisfaction, however, to know that a blood serum is now obtainable which quickly destroys the germ and thus places the resulting diseases under easy control. The preparation referred to is known as "Marmoreck's Serum," and is prepared by its discoverer at the great Pasteur Laboratories in Paris, France. As in other cases where serum therapy is indicated, it is often necessary to use it *promptly*, and for this reason physicians or their druggists should carry a small stock of Marmoreck's serum for emergencies. This new serum, with all the biological products of the Pasteur Laboratories of Paris, is imported and sold by the Pasteur Vaccine Co., of Chicago, who will gladly send literature or written information on request.

Selections.

FROM CURRENT MEDICAL LITERATURE.

A Fletitious Microbe—the Cause of Baldness.

An ingenious Frenchman, of a commercial turn of mind, has created a sensation by proclaiming himself the discoverer of a microbe which is alleged to be the cause of baldness. In spite of the resignation which people under forty affect when the hair thins to a perceptible degree there is unquestionably a very lively and general desire to preserve the capillary thatch. No better proof thereof can be required than the eagerness with which the victims of premature calvities give a trial to every new compound vaunted as a sure specific against the depilatory process.

Now there are certain forms of baldness, especially of the local kind, which are undoubtedly due to the ravages of microbes or fungi, but the usual form of baldness is determined by a readjustment of the peripheral circulation in virtue whereof the scalp or certain parts thereof, no longer receive the normal supply of blood. It is a curious fact that the incidence of this retrograde process is greatly influenced by hereditary proclivities.

In some families the area of the baldness proceeds from before backwards, the forehead becoming higher and higher until, so to speak, it reaches the back of the head. Others again, and these are probably the great majority, appear to grow through their hair, the denuded pate making its appearance at the apex of the human oval. Thence it extends antero-posteriorly, until the top of the head resembles a wide and glistening stream with rushy margins, the long straggling rushes being carefully drawn along or over the vacant territory for the purpose of rendering the nakedness of the land more conspicuous. To talk of a microbe of baldness in connection with this general process is obviously ridiculous, and would not be worth refuting or even alluding to were

it not for the fact that a number of lay journals of standing have lent their columns to the subject, foremost among which we may mention the *Contemporary Review*. All this is part of an ingenious scheme of advertisement, and the references ought properly to have been relegated to the columns *ad hoc*. Remedies for baldness are at least as numerous as cures for phthisis, and the efficacy of the one is about on a par with that of the other. — *Med. Press and Circular*.

Treatment of Eczema by Picric Acid.

Brousse recommends the employment of picric acid in some cases of eczema, the indications being an acute attack, either primarily, or supervening on a chronic, particularly should there be any tendency to epidermic ulcerations, and in the seborrheic or impetiginous eczema of children. But the method is contra-indicated in chronic cases, and generally in those accom-

panied by epidermic thickening, though should there be much itching in the latter it may prove beneficial. The method of employment is as follows: A saturated solution of picric acid (12 g. of the acid dissolved in 1 litre of tepid water, allowed to become cold and decanted) is painted on the affected parts with a brush, the application extending slightly beyond the limits of the eczematous area, then covered immediately with absorbent wool, or it may be with a compress soaked in the same solution, and over which the wool is applied. This is allowed to remain on for about two days. An indispensable precaution would seem to be previous cleansing of the skin with some antiseptic, so that no suppurative organisms may be allowed to remain in contact with the diseased skin during the time that it is covered by the wool dressing. The staining due to picric acid may subsequently be removed by washing in a saturated solution of lithia carbonate. — *Indian Lancet*.

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Original Articles.

DIABETES:

THE DIAGNOSTIC VALUE OF THE ANILINE DYES.¹

BY LUDWIG BREMER, M.D.,
ST. LOUIS, MO.

The demonstration of the blood-test for diabetes is a very simple matter if the experimenter knows how to avoid the sources of error. The test which I am going to demonstrate being a macroscopic one, glass slides are to be used to spread the blood-film on, although there is no objection to coverslips. The advantage of choosing slides consists in their handiness. Any physician not acquainted with microscopic work can do it when once instructed in the technique by ocular demonstration. The main points to be observed in making the test are the following: Clean the slides thoroughly in soap or weak ammonia-water; rinse in clear filtered water and dry with a clean towel or cloth. If not used immediately after being prepared in this manner, wrap a number of them, say ten or fifteen, in tissue paper to protect them from dust. Do not touch the part of the slide that is to be smeared with the blood to be examined with your fingers. Protect the blood-film from dampness. If water, even in minute quantities, is spattered on the preparation, the specimen is spoiled for the purpose. Have an ordinary metal oven and a thermometer registering about 250 or 300 degrees Celsius ready. Puncture the tip of a finger or the lobe of an ear with a sur-

gical needle. The drop of blood obtained in this manner must be rather large, in order to procure a thick film. One puncture will suffice for a good many specimens; it is not necessary to observe any precautions as regards the purity of the blood, such as are recommended for the preparation of microscopic specimens.

It is advisable to prepare about eight or ten specimens both of diabetic and non-diabetic blood, the latter to serve the purpose of control. Whether the blood of a person in good health be chosen for check preparations or that of patients suffering from any disease whatsoever but diabetes, is immaterial. There is, as far as my experience goes at the present time, no disease that shows the same blood reaction as diabetes does.

The process of preparing the specimens is as follows: Take a large-sized drop of blood, obtained as directed above, on the shorter edge of a glass-slide, such as is ordinarily used for microscopic purposes. Spread it on another slide so that it covers about one-third or one-half of the latter, holding it, while spreading, at an angle of about forty-five degrees. By using very slight pressure and interrupting the spreading process at short intervals, say six or seven times, a wavy appearance of the film is produced, which is preferable to the uninterrupted or homogeneous spread, because thus a more uniform specimen (so far as thickness of the film is concerned) can be obtained; besides, the thin strips between the bars admit of microscopic examination, thus combining the advantages of a macroscopic and microscopic specimen. The film, when spread, must be of such a degree of thickness that a red color of the bars or ridges is plainly apparent; if spread

¹Demonstrated by invitation before the Academy of Medicine of Cincinnati, February 21, 1898.

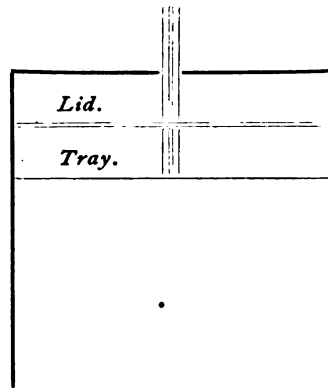
too thinly, the reaction is indistinct and unsatisfactory. The specimens, both of the diabetic and non-diabetic blood, are now placed in a heating apparatus. Any kind of sterilizer (one without a water-jacket) may be chosen. It must be of the temperature of the room—that is, not previously heated. (I go into such a detailed description because I know that negative results have been obtained by infringing on these rules, which, however, to the hematologist of some experience, are self-evident.)

One need not necessarily be put to the expense of an oven, but can improvise one with the aid of a tin box and a thermometer, viz., take a five-ounce quinine can, bore two small holes through two opposite walls at equal distances, four inches above the bottom of the can. Draw through them two copper wires, to support a square piece of wire screen cut to fit the interior dimensions of the can. A circular opening is made in the lid large enough for a perforated cork holding a thermometer, registering about 250° C. In the four corners of the bottom of the can holes having approximately the diameter of half a line are bored. They serve the purpose of establishing a draft for the proper circulation and diffusion of the heat. Unless the cork fits very tightly in the opening made in the lid no holes are necessary in the corners of the latter. The cover-glass preparations, smeared side up, are arranged in rows on the tray, care being taken that they do not overlies each other. The point of the bulb of the thermometer is to be adjusted in the same plane with the specimens on the tray. An alcohol lamp or small gas-jet may be used as heat generators. The temperature is run up to about 135° C. in from four to six minutes. It is advisable to place the oven on a tripod or other metal stand, in order to prevent shifting and overlapping of the cover-slips. One or two degrees above 135 will not interfere with obtaining a good result. Have the cover-glass slides in a perfectly horizontal position.

With an apparatus like this examinations of the blood may be made at the bedside. Another advantage of the contrivance is the facility and readiness

with which the preparations may be heated; they will then retain their specific selective staining properties for months, whereas the film not properly hardened loses them in a short time. Its chemic properties are easily affected by the dampness of the atmosphere.

Thermometer.



Exact temperatures are more easily obtained with the little apparatus described (and illustrated) than larger and costlier ones.

The slides, which, by means of a lead pencil, have been marked on the film as diabetic and non-diabetic respectively, in order to avoid mistakes, are now arranged on the perforated tray in two rows in such a manner that the smeared portions of the slides face each other. The object of this arrangement is to insure an equable degree of heating for all the specimens. The tray must be at least six inches above the bottom of the apparatus. With a closer proximity of the slides to the flame unevenly heated specimens are apt to result. Thus, when slides are placed on the lower tray (there are generally two accompanying an oven) the circular holes are reproduced on the blood film, these places staining differently from the rest of the film, owing to differences of heat-degrees. For the places corresponding to the holes have been subjected to higher temperatures than the rest, overlying the metal.

In order to obtain useful and reliable specimens, a small gas flame is turned on at first. If the flame is too voluminous, and the rise of temperature too

quick, a glazed condition of the blood-film is the result; the preparations are unfit for the purpose. Formerly I used to meet with such mishaps quite frequently, being unable to explain their cause. I attributed this occurrence to the premature opening of the oven door, owing to the fact that the mishap generally took place when I was in a great hurry to make the test. I have found, however, that it is the effect of too sudden a rise of the temperature, as stated before.

Generally speaking, it will be found to be a rather difficult task to obtain the exact temperature required for a satisfactory result. The optimum degree of heat is at 135° , or rather in that neighborhood. This temperature is to be reached in from six to ten minutes, although a certain latitude is permissible, both as to heat degree and time of heating. Thus, a degree less or a few degrees more than 135° , or a few minutes more than ten, do not materially affect the result. But too long an exposure to the degree mentioned will amount to overheating, and the differentially diagnostic stain will not be brought out, or, if obtained, will not be pronounced enough for diagnostic purposes. Again, a temperature of over 140° jeopardizes the result, the selective staining faculties of the corpuscular elements of the blood being lost. Underheated specimens also yield conflicting color-pictures, and below 129° they become absolutely unreliable. Proper heating constitutes the pivotal point of a reliable aniline color-test of blood in diabetes. Hence Ehrlich's copper plate is entirely impracticable for this purpose. A little experience, which, however is soon acquired, is requisite for reliable work. Generally speaking, the flame has to be turned off when the mercury has risen to 130° . The reserve heat in the oven will send it up to the desired level. If the heating process has been rather rapid, it will climb beyond 135° ; if slow, the expansion of the mercury column will stop short of the optimum degree.

After the proper temperature has been obtained the apparatus is allowed to cool off gradually. The door ought not to be opened until the mercury

registers 70° or less. I believe it is a still better plan to allow the apparatus to completely cool off.

As remarked before, the glazed or lacquer-like appearance of the blood-films obtained on some occasions is not due to the premature opening of the oven door; still, in order to get the best results it will be well to adhere to the rule laid down. It may be of interest to state that the cause of the glazed appearance of the film consists in the changed character of the protoplasm of the erythrocytes (red corpuscles), which give the impression as if they were fused or melted together, their contours having disappeared. The white corpuscles have, as a rule, preserved their identity, although their staining faculties have been impaired. I have dwelt on these points at length because familiarity with them will save the experimenter a great many disappointments. Many a time, even after a long run of uninterrupted successful tests, I would become wavering and uncertain as to the correctness of my observations whenever flaws or failure and contradictory results were encountered, due, as I found later on, to a want of attention to the matter of proper heating.

The uniformity of results became perfect when I found that it was by no means necessary to use the eosin-methylene blue compound originally recommended by me for making the macroscopic test. In the course of continued experimentation I discovered that quite a number of well-known and often used aniline dyes give better and more unequivocal results than the compound formerly employed by me and considered by me at one time as being the only color-reagent of diabetic blood. I now use and recommend stable and readily procurable dyes, viz., Congo-red, methyl-blue (*not* methylene blue, as almost all the reports and notices of the medical journals referring to the test have it), or acid violet. The manner of procedure is as follows: Make a 1 per cent. aqueous solution say of Congo-red and fill a Naples tube, or any other kind of receptacle used for similar purposes, about one-half full so as to cover the blood-film on a slide put in the

solution. Take two of the specimens prepared as directed above, one diabetic, the other non-diabetic, and place them back to back, so that the smeared portion of the slide may be completely immersed in the reagent, in the staining fluid, and let them remain two or three minutes; then rinse them in clear water, when it will be found that the diabetic specimen is colorless or nearly so, a slight orange tinge being discernible at best, whereas the non-diabetic film is stained a pronounced red of the characteristic Congo-red hue. A $\frac{1}{4}$ or $\frac{1}{8}$ per cent. solution of methyl-blue gives under the same conditions corresponding results, the diabetic film remaining unstained or showing a slightly greenish-yellow hue, whereas the non-diabetic is of a deep characteristic methyl-blue color. Blood preparations treated with a $\frac{1}{4}$ per cent. solution of acid violet also furnish very striking diagnostic differences.

Biebrich scarlet has the opposite effect of the dyes just mentioned, the diabetic film taking on the stain, whilst the non-diabetic is only faintly colored. The time of exposure to the reagent is about three or four minutes, but a longer time, say six and more minutes, does not alter the result. It is different, however, with the dyes first treated of; too long an exposure to the staining fluid effaces the difference in color, the diabetic assuming the same tint as the non-diabetic. This phenomenon is caused by the fact that the water of the solution draws out of the blood elements the selective material upon which the differential reaction depends. Roughly stated, a minute and a half or two minutes suffice to make a diagnosis so far as the action of the reagent on the blood is concerned, but five or ten minutes will, especially in cool weather, give satisfactory color-differences.

In order to obtain perfectly reliable results it is well to pay strict attention to the following technique details:

1. The slides ought to be approximately of the same thickness. Thin ones are preferable.

2. They must be well cleaned, and not be touched with the fingers either before or after smearing.

3. The blood-film must be of the same thickness; of course, this can be done only approximately.

4. As nearly as possible the optimum temperature (135°) ought to be reached.

5. The time of exposure is of great importance, although in this matter, as in that relating to the temperature, a certain latitude is permissible.

6. The solutions must be freshly prepared, a few hours being sufficient, especially in warm weather, to destroy their utility.

Congo-red seems to lose its staining qualities soonest. Alcohol must be rigorously avoided in making the solutions. I would also like to emphasize at this place that the alcohol-ether mixture used by me for fixing the blood-film has been discarded. Strict adherence to these rules insures positive results.

The above-mentioned dyes are by no means the only ones with which diabetic blood can be told from non-diabetic blood. I have experimented with quite a number of other aniline dyes, but those named are, as far as I know at present, the most reliable reagents for the purpose. I would above all recommend Congo-red, although quick and brilliant color differences are obtained with methyl-blue and acid violet. The strength of the solutions is also an important point. A too concentrated methyl-blue solution, for instance, stains diabetic and non-diabetic blood nearly alike; at all events, the difference is not striking enough to be of diagnostic value.

The blood reaction in diabetes sometimes persists after the disappearance of the sugar from the urine. After a prolonged absence of the sugar from the urine (the time varies with different patients) normal reaction sets in.

I wish to distinctly state at this place that in a previous article I stated that "sometimes" the diabetic can be told in this manner. Of course, some diabetics get well; their blood will show the normal reaction. I have, however, observed cases in which the diabetic blood reaction persisted a long time after the disappearance of glucose in the urine, then gradually passed into the

normal stain, to revert to the diabetes type, when a relapse, evinced by the presence of sugar in the urine, took place. In quite a number of persons actually or apparently recovered from diabetes, I was able to obtain the urinary aniline color-test. I have since modified and simplified the method and will describe and demonstrate it to you.

* * *

REMARKS.

The doctor proceeded to show the aniline stain reactions of diabetic and non-diabetic urines. Instead of giving his explanatory remarks made on this occasion, it is deemed advisable to incorporate Dr. Otto Juettner's translation of an article written by Dr. Bremer on this subject for the *Centralblatt für Innere Medizin*, 1898, No. 13, which deals with the subject more fully:

A certain characteristic reaction of aniline dyes upon diabetic urine can be demonstrated, analogous to the behavior of these dyes toward diabetic blood. Neither in the analysis of diabetic blood nor in the examination of diabetic urine it is a question of sugar being present or absent. I have discussed this subject in an article which appeared in the *New York Medical Journal*, March 13, 1897, under the following title: "On the Chemical Behavior of Eosin and Gentian Violet toward Normal and Diabetic Urines."

The object of the present communication is to describe a simplified method dependent upon the different ways in which aniline—violet—dyes affect normal and diabetic urine. The technique of the test is very simple. Into each one of two perfectly clean and dry test-tubes, one containing 10 c.cm. of normal, the other one the same quantity of diabetic urine, is placed $\frac{1}{2}$ mg. or a little less of finely pulverized gentian-violet in such a manner that the dye-substance will float as nearly as possible in the centre of the column of urine without touching the sides of the tubes. If the specimens of urine are fresh and of nearly body-temperature, it can easily be observed that with normal, i.e., non-diabetic, urine the powder is inclined

to float on the surface and enter the body of the fluid in the form of light violet clouds, stringy or thread-like formations, which, upon gentle shaking, disappear; and that, on the other hand, fine, undissolved, dust-like particles gravitate slowly toward the bottom of the test-tube. Even after repeated and forcible shaking the (normal) urine appears hardly at all, or at the very best only slightly colored. The dye-stuff remains one solid lump, which, aside from other small insoluble particles, floats in the fluid. It almost seems as if the particles of dye-stuff were surrounded by an impermeable crust through which the fluid cannot penetrate. Even if the specimen stands for hours and days at a moderate temperature, no change takes place. It is true that during our hot summers in the Mississippi Valley the test-fluid after a few hours shows a reddish hue. The conclusion which can be drawn from the above experiment is that normal urine is not in any way acted upon by aniline dyes.

The behavior of diabetic urine under the same conditions is decidedly different. Within a few moments a more or less deep stratum beneath the surface of the fluid appears blue or bluish-violet. Upon shaking the color does not disappear, as is the case in non-diabetic urine, but causes coloration of the entire mass of the fluid. The more grave the diabetic condition, the more rapid and marked is this coloration of the urine. The difference in the color of the two test-fluids is most striking. For obvious reasons I employed for these tests Merck's products, and I believe that gentian-violet B is the most useful, although results of some value can be achieved by using gentian and Hofmann's aniline-violet. I have in my possession a sample of gentian-violet in a finely powdered state and of light weight, yielding better results than the other products named. Unfortunately, I do not know whose make it is. Some of the products on the market do not at all or only imperfectly answer our purpose, since they also color non-diabetic urine. Dye-stuffs which do not readily float on the surface and drop to the

bottom of the test tube are likewise less available.

A low temperature decreases the solubility of the dyes mentioned, even in diabetic urine; it is advisable in the winter time to bring the temperature of the contents of the test-tube up to about that of the body by placing the tube in warm water. If, on the other hand, methyl-violet 5 B (Merck) is used as a reagent, a striking difference of color manifests itself even at a low temperature, normal urine showing a faint reddish violet; diabetic urine, on the other hand, turning distinctly blue or blue-violet. Higher degrees of temperature increase the solubility of methyl-violet 5 B in normal urine in such a way that the difference becomes less marked.

In order to explain these differences of color it is but natural to think of the different degrees of acidity in the several specimens of urine. Gentian-violet, as we know, reacts very readily upon even small quantities of HCl in examinations of gastric contents. But it can be demonstrated that the addition of moderate quantities of mineral acids (perhaps one drop to 10 c.cm.) to normal urine do not change the result to any appreciable extent. Likewise, the reaction described is not affected if diabetic urine is rendered moderately alkaline. The addition of sugar is also without effect.

Among the various aniline-dyes recommended by me for the blood-tests in diabetes congo-red seems to be available. Methyl-blue cannot be used. I have employed tropaeolin, benzo-purpurin and dinitroresorcin, and expect to publish my results briefly. In a general way it can be stated that these bodies are more easily soluble in (heated) non-diabetic urine than in (heated) diabetic urine, that their behavior, therefore, is just the reverse of gentian-violet.

The peculiar reaction of aniline-violet upon normal urine can be attributed to certain reducing substances not possessed by diabetic urine. The disappearance of the violet clouds in non-diabetic urine suggests the formation of leuco-products.

Next to the violet dyes ethylene-blue

is available in a similar manner. Diabetic urine turns blue, normal urine green. If the specific gravity is low (under 1015) there are formed in non-diabetic urine blue and green threads extending from the surface of the specimen to the bottom of the tube. If the specific gravity approaches that of water, frequently three colors are seen, to-wit, green, blue and red.

The tests with aniline-violet show a coloration of non-diabetic urine of unusually low specific gravity (under 1015 or 1014) approaching that of diabetic urine. In polyuria, *e.g.*, in diabetes insipidus, after ingestion of great quantities of fluids, after the use of diuretics and after the consumption of large quantities of alcohol, especially beer, the tests become unreliable, although even in these conditions a certain difference between the reaction of these dyes and their coloring effects in diabetic urine can be determined. If the reaction in a specimen of high specific gravity (about 1030) is marked, we are surely dealing with a case of diabetes. In an apparently cured case of diabetes I was able by means of the above procedure to demonstrate disturbances of nutrition due to diabetes for weeks after the urine-examinations and blood-tests had resulted negatively. If non-diabetic urine of medium specific gravity reacts in an uncertain manner, *i.e.*, manifests an abnormal solubility of the violet-dyes, it is invariably indicative of some interference with the normal physiological metabolism of food-elements. As is the case in the tests for diabetic urine, there are also in connection with the procedures quoted by me some cases which yield positive results only after repeated examinations.

I do not believe that the above tests in point of diagnostic value are equal to the sugar-tests, but I am convinced that in doubtful cases they may serve to establish the diagnosis, and that they will be found serviceable in many instances in which the sugar-tests yielded uncertain or negative results. The quoted facts may perhaps throw some light upon some of the many dark points in the composition and the chemistry of normal and diabetic urine.

THE MANAGEMENT OF PREGNANCY AND LABOR¹

BY AMELIA J. PRIOR, M.D.,
XENIA, O.

The subject of obstetrics may well be considered one among the oldest in the study of medicine, and while it is old it is yet ever new. New ideas are being advanced, new methods are being taught, and new devices are being constantly put forward to aid us in the precision of our work; and yet who is there among us who will dare say that he has encountered all the complications of obstetrical practice and fears nothing new? Unless we have previously examined our patient, how shall we know but this will be the one abnormal case in many thousands? Is not this sufficient argument for the closest, most careful study of our subject? Where in all the domain of medicine and surgery shall we find any place in which more skill and ability are required than in this branch of medicine? Who has a position of more responsibility than the obstetrician? Surgeons who perform the most difficult operations realize their great responsibility, because the individual places her life in his hands; but here is a case where the responsibility often rests with the physician for the life of not only one, but two, human beings. Take, for instance, two complication which are liable to arise—post-partum hemorrhage and placenta previa. There is no time for reasoning or study to find the best methods of combating these, but the physician must be prepared to act rapidly in order that the life of both mother and child shall be saved.

In bringing this paper before the society to-day I shall not lay any claims to original ideas or presume to give you anything new. I imagine that most, if not all, of you are my seniors in practice, and have probably had a much wider experience along this line than I have; but my purpose will have been accomplished if I shall succeed in presenting

the subject to you in such a way that an interesting discussion may be elicited; that not only the essayist, but each member present shall feel that the hour has been profitably spent.

Some one may feel inclined to criticize the subject by telling us that physicians seldom have the opportunity to manage a case of pregnancy. Suppose we take it for granted, who is the culpable party? I maintain that the physician is. I have observed that women are not only willing, but take great pride in quoting their physician as authority for what few rules of hygiene they do possess. When I say rules of hygiene I mean rules that are laid down by reputable physicians—men who are authority on those subjects—and not such rules as they obtain by reading literature, which is scattered broadcast over our land, and which, too often, entraps the unwary. We can see that women naturally feel a delicacy in consulting a physician in regard to these matters, but if the physician would begin by instructing each patient as he has an opportunity it would not be long until the women would become accustomed to the habit, and would look at it from a different standpoint. As it now is there are many mothers who will not discuss these matters with their daughters, and when they are called upon to assume the responsibilities of motherhood they are in utter ignorance of all laws which should govern their own health, to say nothing of their ignorance of the laws of heredity and the danger of transmitting to their offspring a weakened constitution, which is the foundation for many ills which will follow them through life, a legacy which very few of us are eager to possess.

In the first place, we should instruct our patients in the matter of diet and dress. It would be impossible to lay down any fast and fixed laws regarding the diet of all pregnant women, but they should have good nutritious diet, fruits and foods which are easily digested and which will aid nature to overcome to a great extent the constipation with which so many pregnant women are afflicted.

The style of dress which fashion has

¹ Read before the Green County Medical Society, Xenia, O., February 3, 1898.

decreed for woman is not one which is conducive to health in pregnant women, especially in the matter of stiff, tight corsets. It were better for her that she adopt some of the many corset waists, which are comfortable and well fitting; or if she must wear a corset, it should be a light-weight corset, with few steels and very loosely worn. She should discard all elastic garters worn above or below the knee, because they interfere with the normal circulation and have a tendency to cause venous congestion. Suspenders should be worn, either those supported from the shoulders or from the waist. In winter skirts of warm material but of light weight should be worn; these also should be supported from the shoulder. Her underwear should be the combination or union suits, which are so much worn at present. By this manner of dress the dragging from the waist and over the hips is reduced to the minimum.

She should have short walks and exercise in the fresh air, and every means that will increase the amount of oxygen in the blood. Later in pregnancy, if there are varicose veins, they should either be bandaged or elastic stockings worn.

If there be undue distension of the abdominal walls, especially in multiparæ with pendulous abdomens, an abdominal bandage of some heavy material should be worn for the comfort and support of the woman, and if possible to correct to some extent the position of the uterus.

If at any time during pregnancy swelling of the extremities occur, an examination of the urine should be made, and if albumen be present proper treatment for that condition should be instituted. Every physician who is engaged to attend a case of labor should make it the rule of his practice to examine in the latter stages of pregnancy one or more specimens of the patient's urine. If the patient be a primipara the dimensions of the pelvis should be ascertained by the use of the pelvimeter; if a multipara, inquire as to previous history of pregnancy and labor, whether normal or artificial delivery.

In pregnancy it is sometimes a diffi-

cult matter to determine where the physiological ends and the pathological begins. For this reason the physician should be sure that he is giving to his patient the best of care, and then encourage her to endure what cannot be cured.

When the time has arrived how shall we conduct our case of labor? I shall speak only of normal labor; to speak of the management of abnormal cases would be to discuss the whole subject of obstetrics. Therefore, I shall confine myself to normal labor.

A physician's manner on entering the lying-in chamber frequently makes a lasting impression on his patient, either in his favor or against him. While he should be kind, sympathetic and courteous, he should be very firm and so well acquainted with his duties that they shall seem a part of his natural self. Especially if the patient be a stranger we should seek to inspire her confidence. Always make a verbal examination the first thing. What are the symptoms of labor? What is the character of the pains, their frequency and duration? Have the membranes ruptured, and when? This should be followed by abdominal examination to make out if possible the position and presentation of the fetus. Auscultate to ascertain the position and character of the heart beats. This should be followed by vaginal examination. Before this is done, however, the physician should be careful to sterilize the hands. They should be thoroughly scrubbed with soap and hot water, using a nail-brush. All dirt should be carefully removed from under the finger-nails, and soap and water again used. Then the hands should be immersed either in a solution of carbolic acid or bichloride (1:1000) and the examining finger anointed with soap or carbolized vaseline. This should be done before each vaginal examination. This duty the physician owes to his patient, and by doing this he may save himself much work and worry, to say nothing of the many days of suffering with puerperal sepsis, with its dangerous results, that he saves his patient. Many women are to-day suffering with pelvic troubles the

result of carelessness on the part of the accoucheur.

For vaginal examination the writer always prefers that the patient should be in the dorsal position, unless the cervix be high up posteriorly; then she should be turned on her side. The attendant should accustom himself to using either hand in examination to avoid changing the patient from one side of the bed to the other. In our vaginal examination we should endeavor to ascertain the condition of the vagina, degree of dilatation of os, whether the membranes have ruptured or not, the presenting part, shape and size of the pelvis. In making a vaginal examination the writer always begins during the interval between the pains, continuing the examination during a pain to acquaint herself of the degree of pressure of head and dilatation of os. With care this can be accomplished with very little additional pain to your patient.

Unless there are some special reasons for not doing so, insist upon your patient remaining up during the first stage. The force of gravity aids descent and flexion, and your patient does not tire so much of the bed and the time does not seem so long. If the bowels and bladder have not already been evacuated, see that it is done during this stage.

There are two important points concerning the second stage which we now wish to discuss. How shall we best preserve the perineum? And shall we use chloroform or shall we not?

We are all aware how much a woman's health and happiness after labor depends upon the integrity of the perineum, and for this reason physicians should use the best means known to art and science to preserve the perineum during labor. There are so many methods laid down in our text-books and given in our medical literature that we cannot follow all of them. Some advocate the use of pressure by napkins wrung out of hot water; some by dry napkins; some with the hand placed transversely, some vertically, and so on, until the wonder is that any woman escapes without laceration. The writer does not believe in touching the peri-

neum. Imitate nature by supporting the head and the perineum will need no support. By constant pressure the circulation is interfered with, the tissues become bruised and more easily lacerated. During the early years of my practice I always used the method as given in Lusk's text-book. It consists in supplying the support not to the perineum, but to the presenting part, with the thumb anteriorly to the occiput and the index and middle fingers posteriorly upon that portion of the head which lies nearest the commissure. This method favors rotation of the head under the pubic arch, and the operator practically has control of the head, and during the pains can hold the head back, and instead of its being expelled during a pain it can be shelled out, as it were, during the interval between the pains.

In 1895, while taking a course in New York, I spent three weeks in a lying-in hospital. There the Ritgin method was almost universally taught. This method is as follows: After the head has descended sufficiently for pressure to be exerted upon the frontal region, the patient is placed in the left lateral position and the head is lifted forward and upward through the vulva, between the pains, by pressure made with the tips of the fingers upon the perineum behind the anus close to the extremity of the coccyx. This is done with the right hand, and you can observe the circulation and amount of stretching the perineum will allow. Then with the left hand you can hold back the head during the pain and deliver during the interval between the pains, and there is not so much danger of tissues being lacerated. The writer prefers this method of delivery to the former where she has full control of the patient; some patients, however, insist on remaining in the dorsal position, because more comfortable to themselves.

With the expulsion of the head danger to the perineum is not always at an end. If the shoulders are allowed to be expelled during a pain they may be the means of lacerating the parts. This, in the majority of cases, can be avoided by lifting the head up and pressing the neck lightly against the pubes, and de-

livering first the posterior shoulder. This narrows the diameter of the shoulders and decreases the danger of laceration.

We now take up the second point of importance, which cannot be wholly separated from the first. Shall we use chloroform or shall we not? In this paper speaking of chloroform has no reference whatever to surgical interference in obstetrics. The question is this: Shall we use chloroform in normal labor? I wish to be understood from the beginning that I have no religious scruples along this line. I do not consider it a sacrilege to mitigate the pangs of child-birth. I do not believe that divine justice decreed that woman should suffer the pangs of child-birth any more than any other pains that chloroform relieves. The problem to be solved is this: Is chloroform safe? The first woman in America to be delivered under chloroform was delivered by Dr. Gardner, of New York, and was delivered fifty years ago—February 2, 1848.

So far as the question of its efficiency is concerned, that was settled long ago; but has the question of its safety been settled? Is it possible always to avert the two great dangers, viz., post-partum hemorrhage and chloroform narcosis? Does it not predispose to post-partum hemorrhage? I believe I am taking a position different from most, if not all, authorities, but I do not believe it has yet been settled. Allow me to ask your indulgence while I quote from some authorities:

"It has a marked effect in predisposing to post-partum hemorrhage" (Playfair).

"It certainly favors the relaxation of the uterus and predisposes to hemorrhage" (Lusk as quoted by Reeves). He goes on to say: "These statements are made without qualification and without reference to the degree of anesthesia, which is a most important point. That effect upon uterine action after delivery should vary with the depth of anesthesia, as it does during labor, is as reasonable as it is in accord with experience." He further says: "However diverse opinions may be upon this question, the

practitioner will do well in practice to bear always in mind the tendency of the drug he is using."

"The question of such an amount of uterine inertia being caused as would render post-partum hemorrhage more frequent or more severe is a far more serious one, and demands careful consideration. Here again the dose influences the result. If the amount given be small and if it be carefully and judiciously administered, it does not promote the occurrence of uterine inertia. Physiological action of the remedy, however, shows that if pushed to the extent of surgical anesthesia, especially for any length of time, its tendency is to diminish uterine contraction. In large doses, therefore, and when long continued, the possibility of hemorrhage must be recognized and guarded against" (J. C. Reeve).

All authors tell us that there is less danger in giving an anesthetic in pregnant women than in the non-pregnant. We are taught, however, that in pregnancy the heart undergoes a physiological evolution, consisting of hypertrophy of the left ventricle, and does extra work which pregnancy requires. There is an increase of vessels in the uterus; consequently, after the uterus is emptied there is a very large exposed surface, and with the open mouths of all these vessels why have we not the very condition that would invite danger, if from no other reason?

At our recent meetings here chloroform narcosis and the mode of death was fully discussed. We need not speak of that again, but I wish to refer to an article by Dr. Dawborn, of New York. He quotes H. A. Hare as saying that "chloroform kills by vaso-motor paralysis, whereby the patient is suddenly bled into his own veins and capillaries as effectively as if into a bowl, and instant anemia of brain and heart results." Lusk also says: "Moreover, after the uterus has been emptied, there is always an increase of blood in the large vessels of the abdomen and a corresponding recession of blood from the head."

Now, in the face of all this evidence, shall we give chloroform to our patients in normal cases of labor? Shall we

cater to the demands of our patients and necessarily expose them to one of the great dangers of labor? These are the reasons I present to the society today for asking the questions I asked in the beginning. Are we justified in giving chloroform, and has its safety been proven?

DISCUSSION.

In the discussion of Dr. Prior's paper, DR. H. R. McCLELLAN said he was sure he voiced the sentiment of the society in commending the writer of the paper for the very thorough way in which she had presented the subject. In addition to the precautions named, he thought well of the effect of hot fomentations in relaxing a rigid perineum. He believes that much can be done to prevent accidents in labor by the hygienic management of cases beginning early in pregnancy.

DR. J. O. STEWART, of Cedarville, makes it a rule to give from five to fifteen grains of chloral hydrate during the first stage of labor when the os seems unduly rigid. He uses chloroform much less often now than formerly in cases of normal labor, and has abandoned the douche as a routine after-treatment.

DR. S. S. WILSON said that he agreed with the author of the paper as to the importance of diet in the pregnant woman, and called attention to the mischievous doctrine taught by such books as the one called "Tokology," in which the diet is limited with the object of preventing the usual development of bony tissues of the fetus. Such a doctrine is worthy of our utmost condemnation, because, if the object is accomplished, the child comes into the world deficient in essential elements of nutrition, or else it must needs extract these from the mother, and thus bring her to her term totally unfitted for the oftentimes all too arduous task.

DR. A. C. MOSSENGER, of the O. S. and S. O. Home, said that he had an opportunity to confirm the opinion expressed by the last speaker by observation of clients in his former field of work, and, furthermore, that he believed that not only were the children very

likely to be born with weak bodies or the mothers much debilitated, but that the labors were very often just as severe as though the more rational diet had been followed. He thinks that some of the discomforts suffered by so many pregnant women can be overcome by the liberal use of carbonate of magnesia as a laxative and sedative to the alimentary canal.

DR. R. B. McCLELLAN thinks that the writer of the paper calls a timely halt in the too frequent use of chloroform in normal labor, and believes it a question of great importance to determine to what extent chloroform is accountable for post-partum hemorrhage. Certainly, in his own experience, he has seen a larger per cent. of such cases than during the years when he did not accede so generally to the demands of his clients for its use.

In closing the discussion DR. PRIOR said she had seen two deaths which were more or less directly attributable to the use of chloroform in obstetric practice, hence she was keenly aroused to the necessity of being more careful in selecting the cases in which chloroform was to be given.

B. R. McCLELLAN, M.D., Secretary.

The Alexander Operation.

Simoes (*La Gynécologie*, Nos. 3 and 4, 1897), after discussing at length the Alexander operation, arrives at the following conclusions:

1. The operation should only be performed in cases of movable uterus.

2. In case of chronic retroflexion, curettement, amputation of the cervix, and colpo-perineorrhaphy should supplement Alexander's operation, since metritis and prolapse usually accompany the retro-displacement.

3. The extra-peritoneal shortening of the round ligaments is preferable to all other methods of supporting the uterus in its normal position, as it is the most simple and the most rational.

4. Lastly, statistics have shown that subsequent labors were less liable to interference after this operation than after any other.—*University Med. Magazine*.

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317 W. SEVENTH ST. CINCINNATI, O.

CINCINNATI, MAY 21, 1898.

Editorial.

AMERICAN DESTINY.

Less than a month ago at this writing war was declared between the United States and Spain. The born pessimist said our Nation was utterly unprepared for war, and a third-rate Nation like Spain would stand even more than a fair show in bringing our Nation to its senses, and give us some right severe raps for our temerity as well as bluster.

Within that period of one month the Spanish Nation has been placed on the defensive, and a naval victory obtained that will be turned to by all future historians as an epoch marking a new era with new national forces in array. The Phillipine Islands and those adjacent, known as the Ladrone and Caroline Islands, have been practically captured by the United States Navy. The fates have decreed that the Hawaiian Islands should belong to the United States; this is a foregone conclusion.

Prior to this time very little has been known about the Phillipines, but

they are large in area and rich in resources. Singular as it may seem, there is a population in the islands named of nearly, if not quite, ten millions of people, which is divided up into scores of tribes, speaking, according to a very reliable authority, more than two hundred languages. It is more than likely that most of the so-called languages are mainly dialects. Most of these people are scarcely semi-civilized; they are quite primitive in their habits and modes of life. The mountains are high, some ranging above eight thousand feet in elevation, which gives an altitude temperature that makes life in the tropics a pleasure. All told, there are perhaps not one hundred thousand native Spaniards in the entire group of islands. Some minerals are found in abundance. First in value is the coal, one vein of which is twenty feet in thickness, and sufficiently extensive to give the islands an inestimable value; an excellent quality of iron, and mines of sulphur; gold is found in small quantities. There is a great abundance of very valuable timber, some of which is extremely hard. The finest of tobacco is easily and extensively raised. Sugar cane, rice and all of the tropic fruits grow in luxuriance. The commerce has been small and slight in comparison with what it should and would be under direction of the United States government.

When Alaska became a territory of the United States it was only known to us as a country whose chief product was icebergs and glaciers, which were supposed to be very fine, but not capable of being turned into commercial channels for general use among our people. Many times the cost of that great north country has been paid back through a development of resources not known to exist, but which came to

light through the enterprise of our people.

There are few drawbacks to development of the Phillipines, chief of which is an occasional visitation of earthquakes, which will effectually bar sky-scraping buildings, but these can be dispensed with (referring to the sky-scrapers). The people, as an inferior race, will eventually be elevated and improved or go down and to some extent succumb in the presence of the more virile Anglo-Saxon. The Latins were unequal to the elevating processes which were necessary, and yet, being in undisturbed possession, development could not take place. The kaleidoscope has had a turn upon its axis. There is the dawning of a new day, and the people of the Phillipines will soon see themselves as others see them.

The United States did not apparently want those islands, neither did it seem to crave the Hawaiians, but the hand of destiny turns them over to America. They cannot be given back to Spain, nor can they be sold or bartered to any other Nation or Nations. Hence, they are for the future to be dependencies of the United States.

The value to commerce of extensive coal fields, hitherto unworked; of coffee fields, rice and sugar cane, to say nothing of the tropic fruits, cannot be estimated. Palm trees are there in great forests, and more palm oil is used in Cincinnati than in any other American city, perhaps more than in all others, which means a great Cincinnati market with wide-open doors for that and every other product of the Phillipine Islands.

These conditions mean a world commerce coextensive with that of Great Britain, and the commerce of the Pacific Ocean will be, hereafter, American. San Francisco will be on the Pacific Coast all that New York is to the

Nation. They will constitute the two chief *entrepôts* of America.

Holy Writ tells us that the gourd of Jonah was the product of a single night. In that night it grew to greater magnitude than other gourds, and its leaves overshadowed them all. The United States is a Nation in its infancy. In a single night Admiral Dewey, with his little fleet, cast a shadow over all the old Nations of the earth, and he was but a representative sprout of the American people—a vigorous one, to be sure, to be touched or taken up tenderly and handled with care.

The Phillipines, the Ladrões, the Carolines and the Hawaiians are sufficient to give prestige to this Nation in the East; they are sufficient to give to America the commerce of the Pacific Ocean, which will be increased one hundred fold, and perhaps ten times that, within the natural life of Admiral Dewey. It also means a necessity for an alliance of the United States with Great Britain. The feeling of the people and of the statesmen of these two Nations is now warm for cementing measures, and in due time the welding will take place. Each can get along without the other, but together they will constitute an irresistible force among the peoples of the earth. They represent the highest type of existing civilizations and the greatest freedom of government, in which the greatest good to the greatest number is guaranteed to all citizens.

The inhabitants of the recent island acquisitions to the United States will be as wards to be instructed; this will be undertaken and carried forward with enthusiasm. In this work American physicians will take a hand and wield a potent influence. Under their supervision the bubonic plague now in the Eastern isles, and yellow fever in Ha-

vana, will disappear, melting away as snow in the face of a summer sun.

With the acquisition of the Philipines and Hawaian group of isles there comes a responsibility—a responsibility for the government and enlightenment of the people. The time is opportune. All of the learned professions are now crowded and just ready to overflow into those lands, and that is one of the things that will take place. The clergy will go there to teach the people religion and morality, physicians will go to improve the sanitary conditions of those lands, and right now the writer will say he believes the finest openings, with prospects for attaining professional success and a living with it, are to be found in the islands referred to. Lawyers will find openings there; new courts and new laws will be necessary. Teachers will be in demand. In fact, there is no calling or occupation where skill and liberal educations will not be needed. Schools, universities and colleges must be opened. There will need to be a medical school and a university at Manila. Merchants and manufacturers will open stores and branch establishments, and that very speedily. The men who get in right now on the metaphorical ground floor will get most of the benefits.

History is being made, and that with a rapidity beyond the wildest imagination of a Utopian stenographer. The young physician who neglects to get in the swim and stay there won't count in the summing up of totals which will be made some of these days.

FORT THOMAS.

This beautiful spot, overlooking Cincinnati and commanding elegant views both up and down the Ohio River, has been designated and set

apart by the Secretary of War as a military hospital. The selection is a wise one from every point of view. Within the enclosure are new barrack buildings sufficient to accommodate more than a thousand patients. The location is in the very heart of the Nation, adjacent to a large city where hospital supplies can always be obtained at a moderate cost. The altitude is five hundred feet above the Ohio River, with perfect natural drainage; abundant water supply of excellent water is obtained at a point above all contaminating influences. The fort and grounds adjacent are of easy access, and but a few hours' ride from the Gulf and Atlantic coasts. The buildings are new and free from all disease germs. The place is high and dry, the climate equable, and the atmosphere soft and balmy, with a freedom from storms.

Fort Thomas, considered from any and every standpoint, is a perfect health resort, with nothing lacking to make it an ideal station for national troops, either sick or well. If the government should need ten or a hundred contract surgeons, they are right at hand to be had at an hour's notice. This is a consideration of some moment in selecting a location for a great central hospital. Such uses of the fort need not necessarily interfere with its occupancy as a post for active troops. Additional unoccupied lands are easily obtainable to any extent that may be desired. As a central military station of the first magnitude, there is not a more desirable point to be found within national bounds.

Some of the advantages have been enumerated, but not all. Fort Thomas is in the very centre of one of the richest agricultural districts in the world, where everything is raised that is necessary to feed man and beast; where manufac-

turing of government supplies of all sorts can be carried on with the greatest economy. Tent-making alone is more extensive in Cincinnati than in all other cities of the Union combined. There is not to be found in America a circus or show tent that was not made in Cincinnati. This is the centre of manufacture of wood-working machinery and of safe-making, to say nothing of the great tool-making industries, some of which are now running twenty-four hours every day in getting out military supplies. All of the others would require but little shifting of machinery to set them in motion on similar lines. The mechanics are here to do the work.

The great central commissary station of the army will be located here for the reasons already given; that is already determined. These close and intimate relations with the national government will do much to lift the city to the place of importance where it naturally belongs, and would now be but for the serious reverses its commerce and manufactures sustained through reverses of the late civil strife.

For thirty and more years the pendulum has been slowly swinging away from the Queen City, but back it comes through the natural forces of gravity and equilibrium. Give it a push and send it along, and the whole Ohio Valley will feel the effect and beneficent influence. It was cruel and devastating war that wrecked some of the best men and business interests of our city. In striking a balance at the end of a century it will be observed with naked eyes that it is a war that turned the scales again in our favor. Let them turn, and medical as well as other interests will again thrive with the thrift of the days of yore, when every man in the medical profession who was reputable and quali-

fied had a living business, sufficient for the support of himself and family.

THE KENTUCKY STATE MEDICAL SOCIETY.

This splendid organization met last week in Maysville. The attendance was fair, material excellent, but not one-half as many present as should have been.

The State of Kentucky has been for a whole century famous for its physicians. As aggressive men in the fields of science, as teachers and practitioners, they have been straight along right in the front rank. The personnel and character of the papers read at the meeting last week do not indicate any deterioration.

But one thing seems to be lacking, if criticism is at all justifiable, and that was brought out very clearly in the address of President Mathews, wherein he referred to the lack of interest in county society organization. This is a matter of the very greatest importance. In these times the medical profession may be viewed as a great army, the units of which are to be found in the county societies. They constitute the regimental organizations. Aggregated in State societies they become brigades and divisions. Then these divisions, when united, are recognized as the American Medical Association. If the county units or societies are from any cause weak or lacking in any material point, the State societies are correspondingly weak, and, the State societies being weak, the great National organization will be sure to assume a wobbly, uncertain gait. Fortunately, many of the States are thoroughly organized in their county society membership, and every year such societies become stronger, and as they become strong are able to give direction to needed

legislation. Unqualified practitioners are kept out of the fold, ethical standards are upheld, and unconsciously the people become trained in right lines pertaining to the functions of the medical profession. This is a very important consideration. The suggestions of Dr. Mathews were timely and should be acted upon. In such lines and in no other can the medical profession in any State be built up. The days of Ishmaelitic, guerilla methods of practice are not in consonance with existing conditions of professional life at its best.

It is invidious to speak of one and not of other papers read before the Kentucky State Medical Society, but without intending a slight to any—and all were good, for the writer was there and did not hear a single poor one—mention is particularly made of one by Dr. Rodman, of Louisville, on the "Influence of Age and Race in Surgical Diseases," which brought out a vast array of original observations that were of very great interest and value.

An unusual number listed in the programme to read papers were not present when their names were called. This is an evil attending altogether too many medical society meetings, which should be remedied in some way. When a man sends his name and title of a paper to be read at a given society meeting and is not present to read his paper, or neglects to send it by a proxy, or does not send a reasonable excuse and apology for absence, a resolution of censure should be offered and passed for his benefit. This may at first seem to be a little bit severe, but certainly is entirely justifiable. Some suspicious men have gone so far as to plainly say that names and papers are frequently announced for personal advertising purposes, when the individual had little or no thought of preparing such a paper or

even of being present at the meeting. It is positively wicked to give expression to such notions, but then such sayings are uttered.

The people of Maysville and the local profession in particular fairly outdid themselves in their hospitable welcome and entertainment of their guests. It was well worth a trip clear across the State of Kentucky to have an opportunity to enjoy the feasts which were spread. Open house was the rule, and exceptions to it neither known nor observed. Drs. Owen, Adamson, Samuel, Picket and Shackelford were ubiquitous, to every one of whom the writer was placed under special obligations. This was not peculiar nor singular to him, but every other visitor was taken in hand and made to feel that he was receiving more attention than any of the rest. This is one of the sly little winsome ways those people have, which was never cultivated, but just born in them. The wives of the local physicians were hostesses one only meets with once in a lifetime unless he goes back and renews the memories dear that are in the past.

The reception, hop and banquet given by the citizens was one of the most delightful and elegant affairs that ever took place. The youth and beauty of Mason County were there. Those Kentucky physicians who were not there will neither appreciate nor recognize all that is meant by this statement, nor is it intended that they should. Men who can go and don't show up at such times are back numbers, engaged in moss raising. To those who were there it is unnecessary to more than mention that the memory of the Maysville meeting and its attendant hospitalities will ever remain green as a beautiful oasis in the often desert walks of every-day life.

The people of Maysville are unique; so are their products and industries. Mason County tobacco is the finest that grows; their maidens the most beautiful and graceful that ever tiptoed to music rhythms; Mason County extract of corn has a seductive flavor and aroma not attained elsewhere. When a Mason County citizen—one born there—grasps a stranger's hand there takes place a peculiar thrill which is like a written language, and speaks whole volumes of the brotherhood of man. The matrons and maidens—of them the pen has not been made or a sufficient deftness of manipulation attained that is capable of doing justice to their home-grown attractions. Failure would follow any attempt at word portrayal. The man who said he would not live always never even went through a corner of Mason County, Kentucky.

Next year the annual meeting of the Kentucky State Medical Society will be held in Louisville. The following officers were elected:

President—David Barrow, of Lexington.

Vice-President—H. K. Adamson, of Maysville.

Second Vice-President—James B. Bullitt, of Louisville.

Treasurer—C. W. Aitkin, of Flemingsburg.

Librarian—B. W. Smock, of Louisville.

Advisory Board—B. L. Coleman, of Louisville; L. L. Robertson, of Middleborough; T. J. Schumacker, of Morganfield; T. B. Greenley, of Meadow Lawn; N. H. McNue, of Carlisle.

LAUDABLE.

As through a rift in the clouds the sun sometimes sends its rays with resplendent glory, shedding a living light through the shadows and shade, so it is that the current newspapers, through the culture and attainments of some of

its ubiquitous staff, tell the people and their law-makers of some historic and scientific truths that are peculiarly potent for the well-being of humanity. From the Cincinnati *Times-Star* of May 11 we clip the following editorial, which is chuckfull of good common sense:

THE ANTI-VIVISECTIONISTS' CRUSADE.

The same spirit that forced Socrates to drink the deadly hemlock, that compelled Galileo to retract his assertion that the world moved, that made Christopher Columbus a butt of ridicule for many years before he discovered America, that threw every possible obstacle in the way of the great scientist Harvey, and that made it criminal for physiologists hungering for knowledge to dissect a corpse, is now at work in the United States Congress seeking to prevent any form of vivisection. The spirit is prompted by ignorance. It comes from a lot of misguided fanatics of the same kidney as those who insist that vaccination against small-pox is vain, that all bacteriologists are humbugs. It is the plan of these fanatics to pass a bill through the United States Congress forbidding vivisection in the District of Columbia and use this as an entering wedge for further legislation in the various States of the Union. As yet they have failed to prove a single case of cruelty in the conduct of animal experimentation in the District. Still they seek to establish a system of espionage upon all physicians and scientists who seek to enlarge the knowledge of the world upon many things pertaining to life and health that are still hidden and vital. The commission which these fanatics urge is to be made up of non-professional persons who are to be given the power to judge as to motives and methods of scientists. It is the purpose to make masters out of tyros, to let the blind lead those who can see.

The same spirit of fanaticism forced Lord Lister, who has probably done more to alleviate the sufferings of the wounded than any other thousand scientists of the present century by his discovery of antiseptics, to leave England and go to the continent of Europe to push his experiments. As a result of the Lister discoveries blood-poisoning in cases of surgery is now unnecessary. During the last war in this country blood-poisoning was responsible for at least 75 per cent. of the deaths of those who

were subjected to surgery. Experiments in vivisection made Lister's triumph possible. One of these anti-vivisectionists recently stated that his design was to stop even the hypodermic puncture of an animal. Carrying the purpose of these people to their legitimate conclusion all physiological work would be stopped. No bacteriological experiments could be made. No tests as to relative value of suture materials, no new abdominal operations could be devised and tried beforehand, no more diphtheria serum could be manufactured in this country, nor could we obtain any more vaccine virus from animals; neither could we consistently import any of the animal serums or virus for use here, as the importation of these articles would manifestly create a necessity for the use of the animals abroad to secure the material.

There is no scientific man in this country of any prominence who favors the bill. The purposes of vivisection experiments carried on as they are in the majority of cases are not to gratify curiosity, but to restore the health and prolong the life of human beings. To oppose them as the pending bill proposes is to co-operate with disease and with death.

THE CINCINNATI HOSPITAL.

Editor LANCET-CLINIC:

On Friday, the 13th inst., an unlucky combination, my wife was run into by a laundry wagon and thrown from her wheel. The driver, a species of what is known in bicycle parlance as a "road hog," was driving very recklessly and trying to hold the dry strip so as to be able to drive still faster without danger of his horse slipping. My wife, cut, bleeding, bruised and dazed, was obliged to call up all the force and determination she could to keep from being hauled off bodily in the patrol wagon, though my office and twenty-five or thirty other doctors' offices were within two squares from the scene of the accident. On numerous occasions during the past ten years I have been called in great haste and responded with agility to accident calls two squares from my office, but could not get there before the patrol wagon. I have become quite accustomed and somewhat reconciled to this, but I do object to having my wife hauled off to the hospital, *sans* consent, while I am in my office two squares away. Very truly yours,

E. S. MCKEE.

Frequent inquiries are made by those interested in the workings of

this institution in regard to what has become of the annual report for the year 1897. Can it be possible that the Board of Trustees have heard that some of their management has not met with public approval? It is an uphill work to stem a tide of evil when one is started in full flow, but the ebb will, must and does come. A reading of the above letter from Dr. McKee should of itself be sufficient to cause an investigation that would expose to public view an enormous evil that is still in evidence and operation.

A few months ago the LANCET-CLINIC directed attention to the obnoxious use that was being made of the police patrol-wagon service. For a time the iniquitous practice seemed to be in abeyance, but it is again apparently as bad as ever. There is always a motive behind such practices. Somebody in some way is reaping direct or indirect benefits. It is for the police and hospital authorities to find out what that motive is and who the beneficiaries are.

In the mazes and hazes, or hazes and mazes, of memory there is fished out a misty, dazy recollection of a sort of razzle dazzle or dazzle razzle dance wearing the name of "the racket," in which the chief feature remembered was the high and lofty kicking that was introduced in the performance. The LANCET-CLINIC is not much on plain performances of an every-day nature, but when it comes to blunt infractions by the civil authorities upon the unmistakable rights of practice by the rank and file of the medical profession, it is ready to join in giving "the racket" for the edification of those who brazenly ignore common sense and common decency in the most sacred relations of life, as was manifested in the case of the police patrol-wagon service and its attempt at for-

cible capture of the estimable wife of Dr. McKee.

There is not a reputable physician in Cincinnati who should not get himself together and stiffen up his courage until his convictions would carry him into the presence of the city authorities with a protest against the abuse of the City Hospital by the police patrol wagon service. While doing this little racket act one should be turned in on the Board of Hospital Trustees for continuing the pay ward of the institution under their care.

Doctors, by profession and practice, are non-combatants, but in the lives of most physicians there comes a period when forbearance ceases to be a virtue; their feelings become irritated, then inflamed, and they, too, remember the Maine.

THE OHIO STATE MEDICAL SOCIETY.

The fifty-third annual session of the Ohio State Medical Society was called to order by the President, Dr. W. H. Humiston, at 2 P.M. The Address of Welcome was made by Dr. E. J. Wilson, and was responded to by the President. This was followed by the report of the Chairman of the Committee of Arrangements, Dr. E. J. Wilson. The gentlemen present with any ladies accompanying them were invited to a reception at the Great Southern Hotel that night. The night following there would be the annual banquet.

The amendment to the Constitution offered by Dr. Harvey Reed at Cleveland, at the fifty-second annual meeting, was read and on motion adopted. The amendment was as follows:

Article III, section 3, second paragraph, to read: "Every applicant shall deposit with the treasurer the sum of \$1.00 as a membership fee," etc.

Dr. C. A. L. Reed offered the following resolution:

"Resolved, That the President be, and hereby is, authorized to appoint for the present meeting nine members who shall constitute an Executive Committee to which all new business shall be referred for consultation and report. The report of the Executive Committee shall

be the special order at the beginning of each session."

Carried.

The Secretary's report was followed by roll of committees; existing vacancies were filled by the President.

A paper, "Partial Cataract," was read by Dr. C. F. Clark, and was discussed by Dr. Robert Sattler. The discussion was closed by Dr. Clark.

A paper, "Some Aspects of Capital Punishment," was read by Dr. F. O. Marsh and discussed by Dr. Kinsman.

A paper, "Functional Heart Murmurs," was read by Dr. C. F. Hoover.

A paper, "Psychic Treatment of Disease," was read by Dr. Phillip Zenner and discussed by Drs. Herrick, Finley, Hoover, Pierce and Barnhill. The discussion was closed by Dr. Zenner.

A paper, "Intestinal Obstruction; Operation; Recovery," was read by Dr. Sherman Leach and discussed by Drs. Baldwin, Ed. Ricketts, R. B. Hall, F. F. Lawrence, Pierce, House and Warner.

"Syphilis of the Upper Air Passages" was read by Dr. Howard Straight and discussed by Drs. Thompson, Finley, Morehouse and Herrick.

"Irrigation with Salt Solution and Other Fluids in Surgical Practice" was read by Dr. Hunter Robb and discussed by Drs. Herrick, C. A. L. Reed and Hoover.

"Monstrosities versus Maternal Impressions" was read by Dr. Courtright and discussed by Drs. Leonard and Collamore.

The session adjourned to attend a reception in the parlors of the Great Southern Hotel at 8 P.M.

THURSDAY MORNING, MAY 5.

Called to order by the President. Committee of Arrangements gave notice of reception in the afternoon at home of Dr. and Mrs. Hamilton for the ladies, the annual banquet that evening.

Dr. F. F. Lawrence offered the following resolution:

"Resolved, That the President appoint a Committee, the President to be *ex-officio* Chairman, to go to Denver to work in the interest of Ohio in general and of Columbus in particular in securing the next meeting of the American Medical Association for Columbus."

Adopted.

A paper, "Movable Kidney," was read by Dr. Yeatman Wardlow and discussed by Drs.

Reeve, Finley, Ed. Ricketts, Merriman, Hoover and Bonifield.

The courtesies of the floor were extended by the President by H. A. Hare, of Philadelphia, who was present.

A paper, "Studies in the Morbid Anatomy of Epilepsy," was read by Dr. A. P. Olmacher and discussed by Drs. Kinsman, Warner, Hare, Beardsley, May, Finley and Fullerton.

A paper, "Uric Acid," was read by Dr. D. N. Kinsman and discussed by Drs. May and Hanson.

A paper, "Lumbar Punctures," was read by Dr. R. J. Wenner.

A paper, "Removal of the Cecum for Malignant Disease," was read by Dr. J. C. Oliver and discussed by Dr. May.

A paper, "Henrotin's Method in Pelvic Abscess," was read by Dr. J. C. Reeve, Jr., and discussed by Drs. Bonifield, Baldwin and Ed. Ricketts.

The society adjourned to meet at 1:30 P.M.

THURSDAY AFTERNOON—EXECUTIVE SESSION.

An address on the Rush Monument Fund was made by Dr. C. A. L. Reed.

The election of officers for the ensuing year resulted as follows:

President—Dr. N. R. Coleman, Columbus.

First Vice-President—Dr. P. J. Kline, Portsmouth.

Second Vice-President—Dr. E. J. Wilson, Columbus.

Third Vice-President—Dr. T. M. Sabin, Warren.

Fourth Vice-President—Dr. D. W. Steiner, Lima.

Treasurer—Dr. J. A. Duncan, Toledo.

Secretary—Dr. J. A. Thompson, Cincinnati.

Assistant Secretary—Dr. H. M. W. Moore, Columbus.

Committee on Finance—Dr. H. A. Zimmerman, Youngstown.

Committee on Ethics—Dr. A. B. Hart, Jr., Marietta.

Committee on Publication—Dr. J. M. French, Cincinnati.

Committee on Legislation—Dr. D. N. Kinsman, Columbus.

Committee on Admission and Medical Societies—Dr. Thomas Hubbard, Toledo.

Springfield was selected as the next place of meeting.

Annual address was then delivered by the President.

A paper, "The Alcoholic Forms of Insanity," was read by Dr. E. G. Carpenter and discussed by Drs. Kinsman, Herrick, Tuckerman and Thompson.

A paper, "Sequences of Abnormal Refraction," was read by Dr. D. R. Silver and discussed by Drs. Baker and Davidson.

Dr. Nicholas Senn, of Chicago, sent his regrets that he would not be able to deliver the Annual Address on Surgery, as he had been called out with the Illinois troops.

A paper, "The Incision Less than One and a Half Inches in Appendicitis," was read by Dr. N. S. Scott and discussed by Drs. Davidson, Warner, Sylvester, Baldwin, Martin, Hall, May and Tuckerman.

The amendments to the Constitution which had been previously called to the attention of the society were approved by the Executive Committee and passed unanimously.

A volunteer paper, "The Use of the Modern Cystoscope," was read by Dr. B. L. Coates, of Cleveland.

Adjournment to meet at 7:30 P.M. for address of Dr. Hare.

FRIDAY MORNING, MAY 6.

It was moved, seconded and carried that the society divide into surgical and medical sections, the programme to be divided.

A paper, "Is the Use of the Rectal Sound Unscientific?" by Dr. T. C. Martin; discussed by Drs. Crile and Freiberg.

A paper, "Ectopic Gestation: What Cases to Operate On," by Dr. J. A. Johnston; discussed by Drs. Hall, Gilliam, Hanson, Wardlow, May, Lawrence and Ray.

A paper, "Clinical Applications of Experimental Evidence of a Research into Collapse and Shock," by Dr. Crile; discussed by Drs. Gilliam, Lawrence, Wardlow, Clark, May and Green.

A paper, "Ovariectomy During Pregnancy," by Dr. Sylvester; discussed by Drs. Gilliam, Baldwin and Hall.

Dr. Hall offered a resolution extending the thanks of the society to the Committee of Arrangements, the local profession and the hotel management for the courtesies extended the society during the meeting.

The session was declared closed.

* * *

Cincinnati was well represented at the meeting by the following physicians: Drs.

J. C. Oliver, R. B. Hall, J. A. Thompson, C. W. Tangeman, C. L. Bonfield, Merrill Ricketts, Edwin Ricketts, G. A. Malsbary, H. W. Bettmann, A. H. Freiberg, F. O. Marsh, Robert Sattler, J. A. Johnston, Joseph Elchberg, Mark A. Brown, E. W. Walker, Julia Carpenter, Lily Carpenter, C. A. L. Reed and H. M. Brown.

Dr. Rufus B. Hall was defeated for the Presidency of the society for the coming year by but seven votes, which, considering that the rival candidate was on his own ash-heap, so to speak, was a remarkable record.

The next meeting of the society will be at Springfield.

Dr. J. A. Thompson, of this city, was re-elected to the position of Secretary.

Dr. J. M. French was appointed Committee on Publication.

I am indebted to the kindness of the Secretary of the Ohio State Society, Dr. J. A. Thompson, for all the data contained in the above minutes. MARK A. BROWN.

EDITORIAL NOTES.

REPORT OF THE HEALTH DEPARTMENT OF CINCINNATI.—Following is the statement of infectious and contagious diseases for week ending May 13, 1898:

	Cases.	Deaths.
Measles.....	17	1
Diphtheria.....	6	..
Scarlet Fever.....	1	..
Typhoid Fever.....	2	4
Phthisis Pulmonalis.....	15	14
Membranous Croup.....	2	..
Pertussis.....	8	1
Varicella.....	5	..
Total.....	56	20

The mortality report for the week ending May 13, 1898, is as follows:

Intermittent Fever.....	1
Measles.....	1
Typhoid Fever.....	4
Whooping-Cough.....	1
Other Zymotic Diseases.....	8—15
Cancer.....	4
Phthisis Pulmonalis.....	14
Other Constitutional Diseases.....	6—24
Apoplexy.....	4
Bright's Disease.....	2
Bronchitis.....	3
Convulsions.....	3
Gastritis and Gastro-Enteritis.....	3
Heart Disease.....	9
Meningitis.....	5
Nephritis.....	1
Peritonitis.....	2

Pneumonia.....	10
Other Local Diseases.....	16—58
Deaths from Developmental Diseases..	6
Deaths from Violence.....	4
Deaths from all causes.....	107
Annual rate per 1,000.....	13.73
Deaths under 1 year.....	20
Deaths from 1 to 5 years.....	11—32
Deaths during preceding week.....	139
Deaths corresponding week 1897.....	90
Deaths corresponding week 1896.....	100
Deaths corresponding week 1895.....	102

A BILL has been introduced into Congress providing for an increase of fifteen assistant surgeons and also that the Surgeon-General of the army, with the consent of the Secretary of War, may appoint as many contract surgeons as may be required to meet emergencies, the salaries not to exceed one hundred and fifty dollars per month.

PUBLISHER'S NOTES.

NOTICE.—Any physician desiring a good location in a country town, where the pay is good, the territory large and thickly settled and where nearly all the roads are gravelled; where there is a grain and stock market, railroad, graded school, church and other conveniences, and who wishes to buy good property (conveniently arranged for a physician), also a small drug business, all offered at a reasonable price, will do well to correspond with or call and see the present owner, J. L. KENNARD, M.D., of Yeoman, Carroll County, Indiana. He desires to change climate on account of failing health. There is no competition.

OLD REMEDY—NEW USES.—There are very many important uses for Antikamnia, of which physicians, as a rule, may be uninformed. A five-grain Antikamnia Tablet prescribed for patients before starting on an outing, and this includes tourists, picknickers, bicyclers, and, in fact, anybody who is out in the sun and air all day, will entirely prevent that demoralizing headache which frequently mars the pleasure of such an occasion. This applies equally to women on shopping tours, and especially to those who invariably come home cross and out of sorts, with a wretched "sightseer's headache." The nervous headache and irritable condition of the busy business man is prevented by the timely use of a ten-grain dose. Every bicycle rider, after a hard run, should be advised a bath and a good rub down, and two five-grain Antikamnia Tablets on going to bed. In the morning he will awake minus the usual muscular pains, aches and soreness. As a preventive of the above conditions, Antikamnia is a wonder, a charming wonder, and one trial is enough to convince.

Selections.

FROM CURRENT MEDICAL LITERATURE.

Painful Peritoneal Adhesions.

Nove-Josserand and Goinard (*Lyon Medical*, January 14, 1898) relate three cases in young women on whom operations on the internal genitals were succeeded by pain which continued until a second abdominal operation was performed, and division of the peritoneal adhesions was followed by the relief of pain. The authors give a general account of peritoneal adhesions that cause pain, usually due to inflammation of one of the abdominal viscera. They may be set up by laparotomy, but it does not appear probable that contusion of the abdomen, apart from inflammation, has, as Reidel has suggested, set up intra-peritoneal adhesions. In addition to giving rise to acute and chronic intestinal obstruction, adhesions may cause much pain. The character of the pain is variable; thus it may be fixed in position and continuous, and not preserve any relation to intestinal movements, or it may be intermittent, resembling colic and preceding defecation, after which physiological act it is relieved for a time. Adhesions may also become more painful during menstruation. By interference with the intestines they may produce constipation, and adhesions attached to the bladder may give rise to cystitis and dysuria. With regard to operative interference, the diagnosis being difficult, the adhesions are sometimes only discovered on opening the abdomen. If their presence be suspected sufficient time should be allowed to elapse, since spontaneous absorption may occur, but if after months of patience the pain gets worse, operation is justified. Against the objection that operation itself is likely to give rise to fresh adhesions the authors refer to their own good results, and advise, besides scrupulous antiseptic precautions, that after the operation the intestines should be kept in active peristalsis by purgatives and

enemata. When the abdomen is opened, if the adhesions be in the pelvis, the position of Trendelenburg will be found to be useful.—*Indian Lancet*.

For What Period of Time Can Immunity from Diphtheria Be Conferred by a Single Injection of Antitoxine?—The Dosage.

F. G. Morril (*Boston Med. and Surg. Journal*, March 3, 1898) arrives at the following conclusions:

1. That immunity in any given case, of no matter how thorough exposure to diphtheria, may be conferred, for at least ten days, by the injection of a small dose (100 to 250 units) of serum, provided it is given twenty-four hours previous to actual infection.
2. That a larger dose (250 units for a child of two, up to 500 units for one of eight or over) will confer safety for three weeks—or, to be a little more conservative, let us say twenty days—under similar conditions.
3. That no harm will result from the treatment in a vast majority of cases of sick children, probably in no case of a healthy child, provided the serum used is up to the present standard of purity.

In conclusion he says that any one who thinks that antitoxine will prevent the occurrence of a follicular tonsillitis or of a coryza in an individual who happens to have the Klebs-Löffler bacillus in his throat or nose will be disappointed; for neither of these conditions constitutes a diphtheria any more than the co-existence of the pneumococcus in the saliva, and a bronchitis constitutes a frank pneumonia. He adds that a physician who fails to promptly immunize the members of a family or close community in which diphtheria breaks out neglects to do his duty by those whose safety lies in his hands.

X, Y, Z-Rays.

The following story is quoted by the *London Chronicle* from the *Ceylon Independent*:

"It was at a quiet party, and Carl Hertz, the famous conjurer, had been delighting the company—especially the ladies—with many of his finest tricks.

One of the parlor-maids had been passing in and out with cups, cakes, glasses, and so on. She was much interested, and when the hostess gave a sign that nothing more was needed the girl still lingered on to see the completion of the trick just begun. 'Will some one oblige me with a heavy shawl or cloak!' he said. 'Now,' selecting a big cashmere shawl, 'you observe the thickness of the shawl?' They all did, breathlessly, including the maid. 'Now, will one of you be good enough to write a number of three figures on a piece of paper, being careful not to let me see what is written?' With trembling fingers one of the girls did so, while the maid at the door leaned forward and began to breathe hard. 'Now, place the written paper with the figures on the upper side under the shawl as I hold it.' It was done, the thickness of the shawl being between Carl Hertz and the paper as he looked down toward it. There was breathless silence. Then he said, 'Surely the number is 761.' It was. He had apparently seen right through the thick shawl. Every one was dumbfounded. Then upon the silence broke the shriek of the maid at the door. With one final gaze at the shawl and one at the handsome conjurer, she hid her rosy face in her hands, yelling at the top of her voice, 'What's the good of me clothes?' and fled." — *Boston Med. and Surg. Journal*.

Diabetic Albuminuria and its Treatment.

Goudart has recently devoted much attention to this subject. First, the frequency of albuminuria in diabetes is variable and may occur in two forms, functional and that due to grave nephritic disease. In the first form it may be extremely slight, or else constitute a very marked feature in the case. When slight, proper dieting and small doses of antipyrine combined with a little bicarbonate of soda in the form of a powder may be given every one and a half hours before each meal. This treatment should not be continued more than three or four days, beyond which time the antipyrine will become injurious. It is well to prescribe some quinine, wine,

and Vichy water at meals. After this treatment the sugar decreases considerably, in other cases it remains unaffected. In the first instance, anti-diabetic treatment may be set aside and attention devoted to the albuminuria; in the second instance, it is advisable to order small doses of arseniate of soda combined with codeine and carbonate of lithia. Most usually the glycosuria diminishes under this treatment, and the albuminuria is then treated in the same manner as above. This line of treatment is usually followed by extremely satisfactory results. After a fortnight or so it is recommended to give phosphates with nux vomica, or later, hypophosphites of lime potash, or soda with quinine. Should the quantity of albumen eliminated in twenty-four hours reach two to three gm., the case is practically one of Bright's disease, and patient is put on milk diet. The author now recommends lactate of strontium in small doses.—*British Med. Journal*.

Sprains of Joints.

W. B. Warde, of Knowsley, England, writes: If cooling lotions are used, or if no special treatment be adopted, a sprain passes through the following stages:

1. The joint swells and is very painful.
2. The pain and swelling during the next two or three days are increased by inflammation.
3. Usually the joint is distended with synovial fluid.
4. The swelling slowly disappears.
5. Considerable stiffness is felt, which is slow in disappearing.
6. There is great tendency to relapse.

To one who has tried this kind of treatment and then tried the effects of pressure the contrast is most marked. Pressure, to act most efficiently, must be uniform, and should be applied as early as possible in order to check the flow of blood from the injured vessels, which appears to be the cause of the early swelling of the joint. There is nothing better than the starch bandage, with a good, thick layer of wool to completely envelop the joint. The effect of such treatment is as startling as it is satisfactory. The pain is immediately

lessened, the swelling is arrested, the subsequent improvement is far more rapid and there is less tendency to relapse. In severe sprains of the ankle I cover the joint with a stiff, starched bandage over a thick covering of wool. The limb is kept raised and at rest. At the end of a week I slit up the bandage, examine the joint and move it as far as it will go in all its movements. If the injury is very severe I place the joint back in the original covering, apply a fresh bandage and have it starched. This, at the end of another week, is again slit up and the joint moved about freely. From ten to fourteen days from the date of the injury I allow the patient to begin to walk, and the distance covered is increased each day.—*Lancet*.

Sir Christopher Heath's Great Compliment to Prof. John B. Murphy, of Chicago.

In his Lane lectures on aneurism, in San Francisco, September 24, 1897, as published in the *Occidental Med. Times* for January, 1898, Sir Christopher Heath, of London, England, paid a deservedly high compliment to one of America's great and original surgeons, the gentle, modest and brainy John B. Murphy, of Chicago.

Heath's address on aneurism was an able and exhaustive one and at a later time the *Mirror* will give an epitome of it; in closing he said:

"Before leaving the subject, let me say that only within the last few weeks, just before I left England, I received a very remarkable paper by Professor Murphy, of Chicago. Professor Murphy, whose name you all know, in connection with the button, which is used for intestinal anastomosis, has shown in this paper something quite new, which will have a very important bearing upon the treatment of aneurism. He has shown this: that if you choose to cut a piece out of an artery—absolutely to cut, say an inch or an inch and a half out of an artery—if you then put one end of the artery into the other end and stitch them together, they will unite.

"So far as I know that is entirely a new fact in pathology, which has never even been suggested before. Professor

Murphy not merely shows this by experiments upon lower animals, but he records a case of pistol wound of the femoral artery where he cut out the piece of the artery through which the bullet had gone, and then, bringing the two ends together, he inserted one in the other and stitched them together and they united, the patient making a perfect recovery. I need hardly point out how very materially that may and will, in all probability, modify our treatment, because, if we can cut out small aneurisms and bring the arteries together, it, of course, will be the most desirable thing for the patient. I think it is well that you should know that this advance in surgery has been made, and I, for my own part, regard it as a very important one."—*Med. Mirror*.

Infantile Stools.

The following summary is appended to a paper contributed to the *Physician and Surgeon* by Dr. Charles Douglas.

Green stools are never healthy.

They always show imperfect digestion.

The damage to the child is in direct proportion to their presence.

These stools render children more susceptible to acute gastro-enteritis in hot weather.

The high infantile summer mortality follows children suffering from this colored stool.

Through unhealthy nutrition the blood is poisoned and the various tissues are improperly nourished.

The excreting organs, particularly the kidneys and liver, are frequently damaged by the extraordinary duties imposed on them in the elimination of these poisonous results from the blood.

The continued irritation and innutrition favors the development of inherited diatheses and acquired cachexias.

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THE PHYSICIAN IN APPENDICITIS.¹

BY HUGH F. LORIMER, M.D.,
FAIR HAVEN, O.

It is not the pretention of the essayist to particularly enlighten any one on the subject of appendicitis, but rather to emphasize some facts already learned concerning the disease, and some facts, too, which should be patent to all.

Aherence to the injunction, "Line upon line and precept upon precept," brings reasonable success in the study of any subject; so that, if to-day in the discussion of this subject, lines already gone over shall be made more plain and ideas already possessed better fixed, the presenting of the subject will have attained the desired purpose.

The reasons for presenting this subject at this time grew out of the results of the discussion at the last meeting. One result was that a very worthy member of this society stated to me that he had never had a case of appendicitis, and that, too, in twenty-five years' practice. My first thought on this statement from one in whom I have much confidence led me to honestly confess that I am a crank on appendicitis, or else the trouble is endemic to the Fair Haven field. Mature reflection prompts me to challenge my friend.

There is a personal reason, of which some of you have knowledge, why I am intensely interested in a profound question. I would not be warranted in saying that pleurisy with effusion was a

thing that did not exist, because in fifteen years' practice I had failed to recognize a case; neither would I be justified in saying I did not have a case. I am not warranted in making any comparison as to the frequency of these two diseases based upon personal experience.

It is not my purpose to make any challenge for the sake of argument, but to emphasize that appendicitis is a common disease. I unreservedly express it as my opinion that if each physician present, with prejudice thrown aside, will equally and carefully look for appendicitis and pleurisy with effusion, and all report in twelve months, appendicitis will be in the lead.

Dr. Norman Bridge says that "appendicitis is one of the most frequent and dangerous of inflammatory diseases in or about the peritoneal cavity." This disease is so common that, when excluding zymotic fevers it is the cause of 80 per cent. of all inflammatory abdominal troubles in the male. This is not meant to show comparison in sexes, but again to emphasize the commonness of the disease. There seems to be difference of opinion as to frequency in males compared to females.

Appendicitis has had a remarkable history as a study, and to America is due advance made in the development of the study. It was twenty years from the time that Willard Parker began opening perityphlitic abscesses, when, in 1886, Fitz gave us the pathology of typhlitis, perityphlitis and cecitis; and Sands took up the work where Parker left off. McBurney lamented the fact four or five years ago that Sand's name appeared so seldom with the subject. Those who condemn surgeons of wanting to find new diseases to be victims of operation would do well to know some-

¹ Read before the Union District Medical Association, at Liberty, Ind., April 28, 1898. Published by request of Association.

thing of the honesty of this great man. You will remember that up to about 1890 much was said about typhlitis, perityphlitis and cecitis, and Murphy says now that 98 per cent. of inflammatory troubles about the caput coli are appendicitis. It is noticeable that almost up to the abandoning of these terms the knowledge of troubles at this location were gained at the post-mortem table; since that time the operating-table furnishes specimens of the disease in all its stages, hence we get recent pathology.

The physician and surgeon have fought on this disease ever since its discovery, from those highest in authority in medicine to the remotest practitioner. It is common now to see such statements as these: "The pendulum is swinging the other way now, as it did in oöphorectomy, and surgeons are not operating in appendicitis so often as in former years." It is probable surgeons are not operating in *peritonitis* so often as they once did because of such an accumulation of experience in unfavorable results; they think it high time that the physician is learning that unwarranted delay means death and the surgeon is quite willing to let the responsibility rest where it should." Because a few years ago a lot of fool doctors became disciples of Beatty is there any one to lift his voice against the honest opinion of Wyeth, Morris, Richardson, Murphy, Senn, Ashton, *et al*, because they demand interference when surgical skill is indicated?

The relation between the physician and the surgeon is the point I wish to make clear to-day. Instead of the physician looking upon the surgeon as a last resort, the interest should be mutual, and it is very important for the physician to make up his mind early in a severe case whether he will establish reciprocity with the surgeon or the undertaker.

The first thing to learn is that appendicitis is a surgical disease; second, peritonitis is not a disease; third, no such thing exists as idiopathic peritonitis.

I believe the time is here when physicians are looking for the cause of peri-

tonitis. One who would sign a death certificate of dropsy now would be investigated by the authorities as to his right to practice medicine. It was not uncommon a few years ago to see in the mortality reports of cities peritonitis given very frequently in the list. For four months last fall and winter I purposely noted the mortality list in a Cincinnati daily, and not one report of peritonitis.

PATHOLOGY.

"From a bacteriological aspect the appendix may be regarded as an open test-tube and the retained secretions a culture medium." (Senn.)

"Appendicitis is an infective exudative inflammation of the appendix vermiformis, following the production of an area of infection of any sort in the mucosa or the peritoneal covering of the appendix. When such an area is produced, bacteria at once enter the lymphoid structure and the cellular coats, the stage of exudation begins, and the tissues are compressed by the exudate. There is no doubt that in the majority of cases there is compression by an exudate which has a tendency to destroy the lymphoid tissues and mucosa, which are confined in narrow limits. In the colon, when infection begins and exudation takes place, there is abundance of room for swelling, and the interstitial exudation does not lead to compression and anemia. In the narrow appendix there is not room. The lymphoid tissues cannot act as a filter for the bacteria, and the elements forming the inner tube are compressed to the point of strangulation in many cases; if not, compression-anemia is produced, allowing of more rapid toxic destruction of the cells, and the toxins produced by the bacteria which have entered the infectious area cause destruction of the cells before nuclein can be poured out and the leucocytes do their work. Thus there is frequently rapid destruction of the mucosa and lymphoid tissue, which should act as a protecting coat, but which, being compressed, are destroyed and become a prey to bacteria. Proliferative endarteritis begins very early, and this occurs in a small

terminal artery, for, practically, the only arterial supply of the appendix is from a solitary terminal artery. If a branch of the artery becomes occluded, a round punch-hole slough forms at the point supplied by this branch. If more of the artery become obliterated there is frequently complete gangrene of the appendix. Only a few hours are required for an obliterating endarteritis to become sufficiently marked to lead to destruction of all parts not supplied with blood by bacteria ready to pounce upon such parts. Usually in the very early stage of the infection there is a mixed infection." (Morris.)

ETIOLOGY.

"The etiology, which was for a long time a subject of contention, is now practically agreed upon. It was very difficult to eradicate from the professional mind the deep-rooted erroneous belief that in a great majority of cases appendicitis was due to foreign bodies admitted into and retained in the appendix, as grape-stones, cherry-stones, fragments of bone, etc. We had four cases of foreign body and 38 per cent. of fecal stone. To indicate the causes of appendicitis, I will use the same classification employed in my article of March 3, 1893:

"1. Simple pus infection, producing the catarrhal variety.

"2. Extensive infection by bacillus coli communis or pyogenic microbes, producing gangrene of a greater or less portion of the appendix.

"3. Pressure atrophy with infection of the appendix: (a) by fecal concretions; and (b) by foreign bodies.

"4. Retention accumulations: (a) from cicatricial contractions, stenosis and obliteration; and (b) from occlusion by enterolith or foreign body.

"From the reports of autopsies collected I find that in 70 per cent. of the cases there is a perforation of the appendix. Of my own cases in which the appendix was removed there was about 80 per cent. perforated.

"Simple catarrhal primary appendicitis, if it exists, is rarely brought to the attention of the physician, and still less frequently to the attention of the

surgeon. Of 207 cases reported, we had but one of this variety. A catarrhal inflammation where the more serious form of appendicitis had previously existed is not uncommon." (Murphy.)

SYMPTOMS.

"The symptoms of appendicitis are: (1) a sudden pain in the abdomen; (2) shortly followed by nausea, and perhaps vomiting; (3) local tenderness over the site of the appendix, and most frequently in the right iliac region; (4) elevation of temperature. These symptoms occurring in this order, without a previous history of genito-urinary infection, lesions of the gall-tracts or Pott's disease, indicate appendicitis with almost uniform regularity. They do not indicate that the appendix is gangrenous or that it is a simple catarrhal appendicitis. They do not indicate whether the appendix has perforated or has not perforated; nor whether the cause is an infection with the staphylococcus, streptococcus, bacillus coli communis or the presence of a fecal stone or a foreign body. They do not indicate whether it is stenosis of the appendix or an appendicitis obliterans, but merely that it is an appendicitis, a disease of the appendix. (Murphy.)

To be called at this hour to see a patient taken suddenly sick, especially with severe pains over the stomach, there would be a routine course as to the subjective examination present itself to me. I was impressed some years ago by reading a work by Sir Henry Thompson on urinary diseases with this statement: That there were four questions always to be asked in suspected urinary diseases, and always in regular order, too. And out of these grew all other questions. The same can be said of pain in appendicitis.

1. Location: Where is the pain? "Over the stomach," "in the bowels," "through the bowels," "in the bladder," are common answers. A great majority complain of the stomach, and this one thing fools more physicians than any other symptom, and so often leads the attendant to at once attempt to confirm the patient's belief that the trouble is in the stomach by the objec-

tive sign, palpating the stomach, and next whack out the hypodermic and treat the patient for neuralgia of the stomach—subjective and objective examination, diagnosis and treatment all in a jiffy.

2. Character: Pain is sudden, severe cutting, sharp, and, as I have heard it described, cruel. The suddenness of the pain is often taken to mean acute indigestion.

3. Cause: Inquiry in the majority of cases will tell you they erred in diet or done something out of the ordinary, which they attribute as the cause, and many will say: "I allowed my bowels to become constipated, which always brings on these attacks," an expression in which there is more truth than poetry.

4. Number of attacks: If you have not found out by the previous questions as to whether this is first attack, such wants to be determined before making an examination. This is not always as easy as we might first at suppose. Not with intended evasion on the part of the patient, but for lack of appreciation as to its importance, which cannot be over-estimated by the physician. You will be told that the patient had attacks of neuralgia of the stomach, or was threatened with inflammation of the bowels, or is subject to bilious spells, or has been treated through an attack of inflammation of the bladder, etc., etc. So much for pain. Vomiting does not last long, as a rule; if it does, and there is stercoraceous matter, the case is dangerous. Pulse does not count for much in the very early stages. Temperature is no guide; it is likely the vast majority of cases never reach 101° ; fatal cases, proving so in twenty-four to thirty-six hours, may never reach 100° .

Tenderness is elicited by pressure over the base of the appendix; the location is not quite always the same. The tenderness can be found over what is called McBurney's point, which is one and a half to two inches inner to the superior spinous process of the ilium, on a line drawn from the process to the umbilicus. (It would be better, as individuals differ so in size, to say where the right side of the recti muscles cross

the line designated.) This point is not found by shutting the fist and bearing down upon the abdomen any where below the umbilicus, but, to use McBurney's own words: "When with one finger you make firm pressure over this point in a case of appendicitis, you will usually find that pain produced is greater at this point than at any other." I would always search for this unawares to the patient. Rigidity of the abdominal muscles, especially of the right side, is a very important sign. Recurring or relapsing appendicitis are applied to cases which recur after first attacks. Recurrent cases are those which come on at intervals of a year or so; relapsing, those attacks which are very close, say every week or two. Symptoms of recurrent attacks are same as those of a primary one. One attack predisposes to another. Hawkins claims 23 per cent. and Fitz 44 per cent. in which there has been a previous attack.

The statement made that appendicitis is purely a surgical disease is not to mean that every case is to be operated upon, but that a surgeon should always be in communication or present in a case that is in any way severe. And note what I say from the medical side of the house.

"We do not know the line between proper medical treatment and the demand for surgical interference, and rather despair of finding it. The medical man is practically powerless to control the destiny of the patient. It is always a surgical disease, and the mortality should be materially lessened by skillful surgical treatment." (Norman Bridge.)

"So impressed am I with the fact that we physicians lose lives by temporizing with many cases of appendicitis, that I prefer in hospital work to have the suspected cases admitted directly to the surgical side. The general practitioner does well to remember whether his leanings be toward the conservative or the radical methods of treatment; that the surgeon is often called too late, never too early. There is no medicinal treatment of appendicitis. There are remedies which will allay the pain, but there are none

capable of controlling the course of the disease." (Osler.)

"As soon as the diagnosis is established—indeed, pending its settlement—a competent surgeon should be associated with the physician for the reason that in the vast majority of cases operative treatment is sooner or later demanded, while the hour for such treatment is best settled by daily conference. The course of cases of appendicitis is often delusive, and the surgeon who operates is frequently more likely to have seen more cases than the physician. The diagnosis being established, operative treatment should be recommended, except in cases where the disease is so far advanced as to make it unlikely that the patient will be saved by operation. My reason for this belief is that while a majority of cases of simple appendicitis may subside with rest, in a very large number, at least 25 per cent., the primary attack leaves the patient predisposed to another, at once more severe and dangerous than the first, while we have no guarantee that any attack will subside without suppuration, or, what is worse, without leaving the condition referred to, in which malignant inflammation or perforation may set in at any moment without warning." (Tyson.)

The consensus of opinion on the surgical side is that when a diagnosis is made in the acute form, if there is not much improvement in the pain, pulse no better, temperature continues above normal and tenderness is marked, operate in thirty-six or forty-eight hours. Osler puts it at the outside seventy-two hours. The medical treatment must be meted out according to each case, and in each case right early we conclude that "a condition and not a theory confronts us."

Rest in bed first.

A great majority of cases get over the attack with free purgation and enemas, while in some anything that brings about peristalsis of the bowels hastens the rupture of an abscess into the peritoneal cavity, followed with peritonitis, and yet if peritonitis should announce itself salines are to be administered with a flush hand.

The physician and surgeon have crossed swords in the use of opium in these cases, the physician often administering opium not only until the patient is easier, but rendering him quite comfortable; narcotizing his own judgment in the case, benumbing the fears of the friends, both physician and friends to be aroused in a few days to realize that the case has proved fatal. The surgeon, on the other hand, is not content with letting the spirit of Alonzo Clark rest, but attempts to drive one more nail in his coffin by giving no opium. It seems to me there are *some* cases in which the pain is in the extreme that the hypodermic injection of morphia is not only indicated as a means of relief, but for its diagnostic value. Though with a sparing hand opium should be given, I should despair of repeating the dose without advisement of surgeon. Hot fomentations are to be used; if tumefaction is present I believe the ice-bag better until surgical aid comes to our hand.

CONCLUSIONS.

1. That as we have no exact means of determining the pathological changes going on we must consider all cases of appendicitis dangerous from the beginning.
2. That to wait for evidence of perforation of appendix, pus, bowel obstruction or peritonitis is unwarranted delay.
3. That marked local tenderness over McBurney's point, continued elevation of temperature, rapid pulse and tumefaction are conditions indicating immediate operation.
4. That in mild cases, with a positive diagnosis, operation is demanded in forty-eight hours if no improvement has taken place.
5. That all cases should be operated upon as soon as the diagnosis is clear.

DR. CHARLES E. PAGE says give the stomach rest in the vomiting of pregnancy, simply sipping a few swallows of hot water occasionally during the day. Before taking food wait till the stomach is tranquil.

RECTAL DISEASES.

BY GEO. J. MONROE, M.D.,
LOUISVILLE, KY.

It is necessary for the medical profession to understand the diagnosis and treatment of rectal diseases. Who has reached the age of thirty years without having been more or less a sufferer from rectal trouble of some description? I imagine I will have to pause for a long time for a negative reply. Very few arrive at this age who have not had hemorrhoids, either internal or external.

The rectum, then, being a part of the human economy so liable to become diseased, we readily see how essential it is that those studying the healing art should qualify themselves so as to be able to diagnose and treat successfully this very necessary part of mankind. Of late years this is being done to a much larger extent than formerly. Several medical colleges have established chairs upon rectal diseases. We are also having more literature than formerly upon the diseases of the rectum. A few years ago we had scarcely anything treating upon this class of diseases; many entire books to-day are being devoted to this important subject, and we notice many papers in medical journals treating upon this branch of surgery. Many books and many papers are crude and unreliable, but they are inducing good men to investigate and practice upon the rectum. We are, however, only beginning to realize the absolute necessity of obtaining a knowledge of the diseases peculiar to the rectum and anus. When we look back twenty-five or thirty years to medicine and surgery as then taught in the medical colleges, how we remember particularly in regard to the absence of teaching upon this important subject! In my attendance at Rush Medical College, in Chicago, in 1860 and 1861, even when the noted Daniel Brainard was Professor of Surgery, I never saw a case of piles or fistula during my two years' attendance, and I believe all the time devoted to rectal diseases would not have exceeded two hours in the two years, and still this branch fell under

the department of surgery. The chair of surgery at that time also was occupied by one of the greatest surgeons that this country has ever produced.

In 1868 and 1869 I attended Bellevue Hospital Medical College. The famous Dr. Van Buren, who afterwards published one of the best works upon rectal diseases that ever has been published; Dr. Frank Hamilton, Dr. James Wood and Dr. Alexander Mott, all noted surgeons, filled the chair of surgery. Yet I never heard but one lecture upon rectal diseases; that was by Van Buren. And I never saw but one case of piles treated during my attendance of four months; that was by Professor Mott. That one case, however, made a lasting impression upon me, as well as the entire class.

Dr. Mott was considerably a dude. I think, one day with another, he was the best dressed man I ever saw. This was so emphatically the case that it was remarked by the entire class. At that time he did not, as is customary now, put on an apron to protect him or to avoid sepsis.

At his clinic hour one morning in Bellevue Hospital the operation was for the removal of hemorrhoids. The patient was given ether, which at that time was required at Bellevue. Professor Mott asked the House-Surgeon if he had given the patient physic the night before. The reply was that he had. He did not say whether it had acted or not, and Professor Mott did not ask him. The Professor grasped one of the hemorrhoids with a pile forceps in order to draw it outside preparatory to ligation. This irritation caused contraction of the sphincter and forcible expulsion of the contents of the rectum, which was stopped in its course by the somewhat large person of Professor Mott. He was standing at the time in direct range of the discharge. Suffice it to say that one beautiful and expensive suit of broad cloth was materially injured, if not ruined entirely.

How many a surgeon can look back over their past experience and relate a similar accident? This was all the rectal surgery I ever witnessed at college. Many M.D.'s—in fact, the ma-

majority—say their preliminary rectal education was very much like my own; in fact, this is about the experience of all doctors who graduated twenty-five years ago—yes, even fifteen years ago. I have asked many physicians how many cases of piles or fistula they ever saw treated at college, and ninety-nine one-hundredths have told me not a single case—that is, prior to ten years ago.

It is said, and I believe it, that the rectum is a part of the human economy of more importance than it was twenty-five years ago, on account of it being affected by diseases of various kinds that were not then known. This, no doubt, is true, but even twenty-five years ago we had a great amount of rectal disease. The rectum at that time was a part of the human subject that was greatly neglected. It was also thought at that time that many of the diseases thus manifested were incurable. Again, it was taught by the most prominent surgeons of that day that it was unsafe to treat rectal diseases, particularly fistula. Many a one has been afflicted with these diseases for years, diseases which made them miserable while living, and no doubt hurried them to the grave years before they ought to have gone there. Even in this advanced and enlightened age some physicians advise their patients not to be treated for this class of diseases. They maintain that disease of this part is nature's method of unloading the system of poisons which would be, and are, injurious if permitted to remain in the system. The same could be said with equal propriety in regard to any disease. Do not cure it, for it is nature's method of removing poisonous materials from the system.

An old gentleman remarked to me a few years ago that he was a sufferer from hemorrhoids. His doctor had told him by no means to have his piles cured, as the disease would go to his lungs if he did. He told his doctor if his lungs were diseased it would be equally as improper to have them cured, for if he did the disease would develop upon the anus and rectum.

I am glad to know, as a rule, surgeons recommend the cure of all rectal

diseases. To say that the cure of fistula will cure consumption is a great mistake. Yet I believe that the cure of fistula in consumptive cases extends the life of the patients by removing an exhaustive drain which is preying upon the vitality of the patient. Also it stops a painful disease, which is rapidly destroying the nervous system. I always recommend the cure of fistula, provided there is sufficient vitality remaining to enable us to do so. I am satisfied the patient will live longer, and certainly in more comfort, if these annoying fistulas are healed. So few physicians knowing anything about rectal diseases, and so many also who have some knowledge of them—ignoring them, as it were—causes a great amount of unnecessary suffering among those who have the disease. I would advise all who may pursue the study of medicine hereafter to learn all they can relative to diseases of the rectum. As to their diagnosis and treatment, supply yourselves with the latest works upon these diseases, and thus be enabled to treat them in their incipency, when they can, as a rule, be easily cured, and before they have done very much damage.

You may say: Why, there are specialists for this class of diseases. That is very true, but how many are suffering with rectal disease who cannot visit a specialist, who are not able to visit a specialist, yet if their home physician was conversant with the treatment of these diseases could be easily and speedily cured at home?

Rectal diseases will continue in great abundance so long as people expose themselves to the causes producing them, and in this fast age of the world there is very little probability of any change in this respect. Therefore, we readily see how essential it is that those studying the healing art should qualify themselves so as to be able to diagnose and treat this very necessary part of mankind. Of late years this is being done to a much greater extent than formerly. Several medical colleges have established chairs upon rectal diseases. We are also having much more literature upon diseases of

the rectum than we had a few years ago. We are advancing in regard to this class of diseases as well as in many others. Yet I believe we are far from being perfect in the treatment of these diseases. We are learning more and more about them every day.

442 W. Walnut Street.

WHAT INFLUENCE HAS INTENSE DRY HOT AIR ON PAINFUL AND INFLAMED JOINTS?

BY VICTOR F. MUELLER, B.S., M.D.,
MILWAUKEE, WIS.

Although comparatively new, the local treatment of painful and inflamed joints by dry hot air has become a recognized and well-known method.

It is needless to say that the treatment of these affections, particularly in the subacute forms, heretofore has been very unsatisfactory, in spite of the fact that the liniments recommended were ingeniously compounded, in spite of electricity, massage and hydro-therapy. Occasionally patients with chronic and subacute articular rheumatism would find relief at any of the so-called hot springs, but it must be admitted that only a portion come back with one more sad experience and disappointed. Besides, every one of our patients has not the means to go to such watering places, and it is involved upon the family physician to relieve them.

What can we promise the rheumatic? If we consider the results we had with the old methods, little, if anything. If we, on the other hand, treat the joints with dry hot air and such constitutional treatment as may be indicated, much.

My first attention to the dry hot air treatment was called by several articles from the pen of Dr. Blech, of Detroit (now of Chicago), who is well known as a medical gentleman of rather conservative views, but ready to defend what he believes to be true and useful for the profession.

Although personally a skeptic, I wrote said author, and he advised me to "see for myself." I followed his advice,

purchased an apparatus from the inventor, Mr. Frank S. Betz, of 80 State Street, Chicago, and began a line of experiments, mainly clinical in character, knowing well that "first come facts, then theories," as far at least as the general practitioner is concerned.

Dr. Woods, of Philadelphia, on the other hand, has not been able to see such good results as Dr. Blech. I have no doubt this gentleman is as capable of handling cases as scientifically as anybody, and, judging from my own personal experience and that of some of my friends, I am forced to the conclusion that something must have been wrong with either the method adopted by Dr. Woods or with his apparatus, which is the English apparatus, patented and rented only. Dr. Woods does not exceed in the administration of dry hot air, moderate temperatures; I have made it a rule to use in my practice the highest possible degrees, never lower than 300° F. and never higher than 400° F. I do not know whether such temperatures can be obtained in other apparatuses (some claim they cannot, and there may lie the trouble); with the Betz apparatus, with the new heating attachment, such degrees can be raised at will.

Another mistake made in inflammatory diseases of the joints is in considering them purely local in character, when in a great many instances there is a constitutional factor continuously at play. Suppose we have a syphilitic arthritis. The dry hot air treatment, no matter how beneficial an effect it may have on the joint, the syphilitic infection must be reckoned with and a course of specific or mixed treatment rigidly carried out. In gouty arthritis it would be a folly to expect the topical treatment of a painful and swollen joint with heated air to ameliorate the general gouty diathesis. Here our dietetic orders must be carried out and alkaline medication advised. My experience is limited to fourteen cases, including traumatic, mono-arthritis, gouty and rheumatic polyarthritis. To cite each of them would require too much space. I shall merely say that in all fourteen cases I have had but one failure, one of

gouty arthritis, because my man stopped after the fourth treatment and went on a spree. The rest were all cured. Relief was experienced in three cases after the first, in four cases after the second, and in seven cases after the third treatment. Patients were dismissed cured, after from ten days' to eight weeks' treatment.

The results were in each instance relief of pain, reduction of swelling, absorption of effusion and of deposits of urate of soda and restoration of mobility of somewhat stiffened joints.

The length of treatment depended on the chronicity, intensity and idiosyncrasy of the patient. Those, for instance, who have been afflicted for years improved only gradually after about five weeks' treatment, while in more acute cases a few treatments sufficed. The length of each treatment given daily was one hour.

Room 5, Metropolitan Block.

INTUBATION: WITH REPORT OF TWO CASES.¹

BY E. H. FRENCH, M.D.,
PIQUA, O.

Intubation of the larynx was first spoken of by Hippocrates, so we read in medical history, but it was left to the ingenuity of Dr. Joseph O'Dwyer to complete the instruments making the operation practical.

The set consists of six tubes, ranging from one and a half to two and a half inches in length; an introducer, extractor, mouth-gag and scale of years. Each tube is fitted with a separate obturator, which, with its probe point, fills the lumen of the tube and extends a little beyond, to prevent any of the membrane, or other substances, occluding the tube.

In selecting a tube for a case we must consider the sex, the male larynx being larger than the female; we must also remember that at or about the age of puberty the larynx is liable to rapid development. After the selection of the tube, pass a strong thread through

the eyelet, a strong braided silk, as it will not twist, thus facilitating its removal; then screw the obturator to the introducer, so that when it is tight the tube's oblong diameter will be parallel with the introducer. Then see that it works easily.

Indications for intubation are the same as for tracheotomy. Whenever the air fails to enter the posterior inferior lobules of the lungs, or whenever the act of breathing becomes labored, then delay is much against the chances for the patient's recovery, as labored breathing will aspirate enough infectious material from the larynx to infect the lungs, producing pneumonia.

METHOD OF OPERATING.

The physician should have two assistants. The patient should be wrapped in a sheet, with his arms at his sides, thus preventing any disturbance during the operation by his grabbing the operator's hand or instrument. The person who is to hold the child should be seated in a solid, low-backed chair. The patient should be placed in assistant's lap, head upon his left shoulder, legs between his knees, and the assistant holding the patient firmly by the arms at the elbow. The other assistant holds the head, with chin slightly elevated, and the mouth-gag, which is placed far back in the angle of the jaws.

The operator stands immediately in front of the patient, holding the introducer lightly but firmly between the fingers and thumb of his right hand, the thumb upon the upper surface just behind the knob used to push off the tube, the index finger being in front of the trigger on the under surface. The index finger of the other hand is passed down the pharynx by the side of the tongue until the beginning of the esophagus is reached, then brought forward in a median line, raising the epiglottis, holding it against the anterior wall out of the way. Then feel for the arytenoid cartilages, which are landmarks, as the chink of the glottis is immediately in front of them in a median line. The handle of the introducer is held closely to the chest of patient in a median line, raising it and passing the distal end of

¹ Read before the Miami Medical Society, at Piqua, O., November 4, 1897.

the tube along the anterior surface of the finger until near the chin; then, waiting until inspiration takes place, raise the handle quickly, without force, push the tube into the chin, and with the knob push off the tube, and press it home with the index finger upon the head of the tube, and reverse the introducer quickly, which draws the obturator out of the tube.

All of this should not take more than ten seconds; if the operator is gentle and careful, the number of attempts is not detrimental; but one attempt, slowly performed, is death.

The gag should be removed at once, allowing the string to remain until you are sure the tube is clear and dyspnea is relieved. Some allow the string to remain, fastening it around a tooth, or to the cheek by an adhesive strip; but there is danger of the string being cut by the teeth and dropping into the lumen of the tube and being swelled by moisture, occluding the tube.

The younger the patient, the longer the tube should remain in place; the average time without antitoxine is five days, but eight days would give more satisfaction, as it would give the patient more chance for recovery; and a well-placed tube can be retained for a long time, doing little or no harm to the parts.

When the membrane becomes loose, and is expectorated, the tube should be removed, as a piece of the detached membrane may occlude the tube.

In extracting, the head is held in the same manner as for introducing; the extractor manipulated in the same way as the introducer; the head of the tube is felt by the index finger, and the point of the extractor is quickly and firmly engaged in the lumen, and the tube quickly withdrawn.

In case of children refusing to take their nourishment, never remove the tube, unless a sufficient length of time has elapsed to need no reintroduction.

In feeding them at first, they should be placed on their backs, with heads below level, and fed liquid food. If they refuse to take their nourishment, then feed them by the bowel. After removal of tube operator should remain

in the house for two hours, and should be close at hand for ten hours, as a reintroduction may be necessary.

Since the use of antitoxine, the per cent. of recoveries has been increased, the per cent. of recoveries in intubation being 76.2, in tracheotomy 37.5.

In most cases intubation is preferable to tracheotomy. It can be performed earlier, as parents will consent to it sooner. It is a bloodless operation, not very painful, leaves no scar, needs no anesthetic; the air enters by natural passages, is warmed and moistened before entering the lungs, thereby avoiding otherwise unavoidable congestion of the lungs, which is produced by the entrance of air through the tracheal tubes; allows more efficient coughing, a very important point, when we remember that coughing is nature's way of draining the lungs.

CASE I.

In February, 1896, Dr. James F. Heady, of Glendale, O., sent me to intubate a case of laryngeal diphtheria in a three-year-old girl, in a family where several other cases of diphtheria existed. The child was in a very bad condition, the pulse very fast, almost imperceptible, and breathing extremely labored; the face had a very anxious look upon it, and was livid.

With the assistance of the child's mother and aunt I operated, and completed it without delay. The relief was almost instantaneous, the breathing much easier, the pulse slower and of more volume, while the face looked more natural. In half an hour the child was asleep, and slept quietly for more than an hour, more sleep than for two days at any one time. She took her nourishment readily, and began to improve. The tube was left in nine days, when it was removed. The case recovered nicely, the voice returning in a few days. The child is alive and well at present writing. No antitoxine was used.

CASE II.

Dr. O'Ferrall, of Piqua, O., being busy, gave me, in December, 1896, a case of membranous croup. After two

days of anxiety I was compelled to intubate.

The child was a female, three years old, in good physical condition, but had been sick a week before Dr. O'Ferrall was called. I received the case on a Saturday morning. The child continued to grow worse, and on Monday about midnight it was evident something had to be done, and soon; so I sent for Dr. O'Ferrall, but could not wait, as the case was too urgent. With the assistance of two neighbors (Mrs. Koehler and daughter) I intubated.

The tube was left in place for five days; then, as the symptoms seemed to have abated (and the authorities state five days to be the average time), I removed it. In a few minutes I saw it was too soon, and in five hours the tube was reintroduced, and left in place for ten days, when it was removed. The child developed double pneumonia, and refused food, so had to feed by the bowel. She made a complete recovery, and is well to-day. The voice returned slowly, but was husky for a long time.

TREATMENT OF FRACTURE OF PATELLA WITH GLUE SPLINT.

BY D. S. HANSON, M.D.,
CLEVELAND, O.

Many a practitioner, from either choice or necessity, is obliged to treat fractures of the patella without operative interference. To them this article is especially directed.

It is said in all cases of complete transverse fractures that a fold of periosteum as well as a blood-clot is interposed between fragments, thereby preventing bony union, and that fibrous union will not keep the fragments in permanent apposition, which no doubt is true in many cases, for they have been reported by many of the foremost surgeons.

My personal experience in a limited number of cases has been that excellent permanent results have been obtained in the following manner:

1. Extend leg on thigh to extreme

limit by letting leg rest on heel and buttock.

2. Apply a layer of cotton from gluteal fold to heel, covering posterior part of leg and thigh only; retain by loosely applying bandage.

3. Approximate the fragments by manipulation as much as possible.

4. Apply strips of strong cotton cloth (each about two inches wide) from gluteal fold to heel, the strips having just been saturated with glue of the consistency of molasses; use about four thicknesses and cover posterior half of leg and thigh.

5. Apply bandage from toes up (snipping first bandage along anterior surface as you proceed upward); when knee is reached apply bandage in figure-of-8 form, so as to hold fragments as nearly in apposition as possible.

6. Saturate bandage over patella with the glue and reinforce by laying two or three pieces of cloth dipped in the glue over patella, thereby forming a knee cap which will do much toward retention in good position.

7. Keep leg well extended until splint and cap is thoroughly dry (twenty-four to thirty-six hours), when you will have a strong, light and durable splint that will not crumble, is clean, and after acute symptoms have passed patient can be out of bed and will have a comfortable convalescence, which will be what the patient desires and physician covets.

Lastly, do not be in a hurry about taking off splint. Three months is not too long to wear it.

A SHEET ANCHOR.—On September 10, 1897, a well-known New York physician, the surgeon of the Third Avenue Cable Railroad Company, returned to the New York office of the Norwich Pharmacal Co., ninety-four one-pound, empty, Unguentine jars. In a letter accompanying the jars the doctor says: "The jars I return to you to-day represent the number of pounds of Unguentine I have used since December last. I have from twelve to fifteen cases a day, motormen, conductors and stablemen, suffering from slight wounds, abrasions, cuts, bruises and burns, and about the only treatment I make is to give them a small box of Unguentine. It is certainly my sheet anchor in practice, as in every instance it heals all the above cases quicker than anything I have ever used."

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DR. J. C. CULBERTSON,
317 W. SEVENTH ST. CINCINNATI, O.

CINCINNATI, MAY 28, 1898.

Editorial.

THE ZOO.

The management of the Zoological Gardens are in financial straits. Some days ago the property was placed in the hands of a receiver. These are the most complete gardens of the kind on the American continent, and have been an attraction to visitors second to no other in Queen City.

The management of the gardens has been extremely liberal, and without charge opened every year at least once to all of the children of all schools. In no slight degree are they thus made educational. The entrance fee is always small, and the summer night concerts have not only been good so far as music is concerned, but the patronage has been by the very best class of citizens, all improper characters being rigidly excluded.

It can scarcely be gainsaid that the Zoological Gardens should belong to the municipal government and become a part of the park system. In New York and Chicago the zoo collections are under such control and manage-

ment, forming a chief source of amusement and education for all classes. Steps should be taken to bring about similar conditions in this city.

There are in Cincinnati a goodly number of men and women of large means who owe it to themselves and to the city to do some generous act for the benefit of their fellow-citizens. A gift of the Zoo to the city, with an endowment for its support, would be one of the finest monuments that ever was erected in any city.

Not long ago a series of parks surrounding the city of Cleveland was made possible by one man. This was a grand demonstration of the good that may be done by those who are possessors of large wealth.

In Chicago, at the close of the World's Fair, a magnificently endowed museum was given to the city by Mr. Marshall Field. The Newbury Library, in the same city, commemorates a citizen. The Shaw Gardens, in St. Louis, are almost as famous as the city itself; they are a gift from Mr. Shaw. Some man's or some woman's name attached to the Cincinnati Zoo would be not only euphonious, but add to the lustrous gems placed in the crown of the Queen City by Longworth, West, Hanna, Probasco, Springer, Sinton and other grand, great-hearted men.

A more mournful dirge was never chanted than that of the requiem of men and women who, having enjoyed the pleasure of great riches, die and leave no aroma of the sweet incense of a recognition of the brotherhood of man.

Several funerals have taken place within the confines of this city where those who died were very, very rich, but made no sign manual that they belonged to the human family, and to that family there was due a debt, with no provision

for its payment. In such cases there are no sweet and joyous memories, no token of even a common respect. Their names are now familiar, but that will not last long; they will be forgotten, and forgotten they should be.

Who will come forward and take the Zoo out of the receiver's hands and add a new name to the column of immortals?

SIMPLES.

A MUSTARD DRAFT.

There is not a more useful topical counter-irritant than a mustard draft. This is well known to every housewife, and should be well known by every physician. Its value is in proportion to the method of making. Nearly every mother will say when asked that she knows how to make a mustard draft, and upon asking further as to how one should be made, in a vast majority of instances an erroneous method will be described. The proper way is to make a paste of ground mustard and ordinary cold or cool water; never warm or hot water. The paste may be diluted with flour or corn-meal, but ordinarily just plain ground mustard is best. The paste should be made thin with the water, and then spread over some old muslin or other like material, and sufficiently large to have it extend entirely over the part to which it should be applied. Having made the spread of mustard paste, it should be covered with a piece of mosquito bar or other netting. Sprinkle over this a little cold water and it is ready for immediate application. The attendant should frequently raise a corner of the plaster to observe the intensity of the redness of the skin, and not permit a blister to form before removal. A mustard blister is an exceedingly troublesome and pain-

ful sore to take care of, and should be avoided.

Many persons have an idea that a mustard plaster should be made with vinegar, warm water, white of egg, or something else than the cold water designated, which is a mistake. Cold water better than anything else speedily extracts the active principle of the mustard, and that is what is wanted, and when once applied does not take long to give warning that it is decidedly warm.

Mustard papers are kept on sale in all drug-stores. They are very convenient, and admirably answer the purpose for which they were designed.

Most of them have capsicum added to the mustard with which they are coated. This does not detract from their virtues. When needed for use one of the papers should be dipped in some cold water. This should only be for a few moments, just long enough to saturate the paper, and the application made at once.

Mustard plasters and papers are only good for a single application. Fresh ones should be used when needed.

SULPHATE OF MAGNESIA.

Among the most valuable remedies to be found in the materia medica are the sulphate of magnesia and sulphate of soda.

Sulphate of magnesia is regarded as in the list of domestic remedies. While it should remain in that class, there is no good reason why it should not also have its place—and one of the very first places—in the physician's armamentarium. In this relation the physician should always designate it by its proper chemical name, and never make use of the common appellation of epsom salts. A rose will smell as sweet if called something else, and sulphate of mag-

nesia be as active when called epsom salts, and yet there are good reasons for the use of the word rose, and for that of sulphate of magnesia.

As a remedy for producing a simple evacuation of the bowels, there is nothing better. Frequently it acts as a stimulant to the kidneys, as well as to the alimentary tract, which certainly does not detract from its value as a cathartic. Another property is found in its antiseptic action upon the contents of the stomach. The well-known cooling effects upon the body are recognized attributes of all the salines.

Epsom salts is plebian, and everything but fashionable. In its use the people recognize its value, and appreciate the fact that an overdose of it can hardly be taken. This is an important consideration in connection with the use of all so-called domestic remedies. And yet few people know how to take or to give sulphate of magnesia, a common practice being to regard a half-ounce to an ounce as a dose. This is very much more than is usually necessary. A much better plan is to direct half a drachm to a drachm to be dissolved in a whole goblet of water, and this solution taken the first thing when the patient gets up in the morning. For a relief of constipation the water is as necessary as the magnesia. It acts mechanically, and assists the magnesia in its stimulative properties. Insist upon the full amount of water being taken.

Sulphate of soda is much less used than the magnesia salt, but is scarcely less valuable, and in very many instances seems to possess an advantage over that remedy, not the least of which may be found in the indisposition upon the part of very many people to be physicked with common epsom salts. There is a psychic condition that should always be recognized, which may be minis-

tered to through a use of sulphate of soda and magnesia. It is these salts in solution that give valuable properties to many mineral springs.

A persistent daily use of sulphate of magnesia in the manner described, *i.e.*, a half to a drachm in a large goblet of water every morning, will cure most cases of migraine or sick headache. In larger doses of the salt given at frequent intervals it is one of the best of remedies for dysentery.

FOR ERYSIPELAS.

A topical application of a paste made of equal parts of ichthyol and lanolin acts almost as a specific when applied and kept on the inflamed skin. The paste should be smeared liberally over some old muslin and renewed morning and evening. This should be supplemented by a purge of calomel and soda, each five to ten grains, followed in twelve or fourteen hours with an administration of a drachm of sulphate of magnesia dissolved in a goblet of water. Isolation and rest, with light nutrient diet for a few days, and recovery will nearly always take place. The exceptions are in broken-down alcoholic drinkers, and where there are other serious organic complications.

A HOME-MADE BATTERY.

A topical application of electricity for the cure of indolent sores, weeping eczemas and neuralgias is sometimes very desirable. This may be accomplished by going to a tin shop and directing the artist in tin to cut a couple of slips of zinc of an inch in width and desired length, then a corresponding slip of copper sheeting. Fit the three pieces together with the copper in the centre; rivet in two or three places, according to length of slips, with copper

rivets; wrap the pieces with one or two thicknesses of patent lint; moisten the lint thoroughly with water and it is ready for application, and may be worn as many hours every day and continued as long as may be thought advisable. The moistened zinc and copper generates a feeble current of electricity, that will sometimes stimulate a healthy action of the skin when other remedies have failed.

UNNECESSARY NOISES.

Last week the people of Cincinnati were kept in a state of continuous nervous excitement because of a blowing of steam whistles, ringing of bells and tooting of horns, which were supposed to be indicative of the amount of patriotism that had been bottled up and demanded some such demonstration for its expression. Those who were in good health but of a nervous temperament were made sleepless, edgy and in every way uncomfortable. The sick suffered intensely, and it is possible that some died in consequence. School children were so distracted that a learning of lessons was seriously interfered with.

At best there are at all times in the city an unnecessary amount of noises, which should be curtailed as common nuisances. They do no good, and sometimes much harm. They are a relic of barbarism. A revulsion came, and this week there is the normal or ordinary amount of noise.

EDITORIAL NOTES.

STATE AND PROVINCIAL BOARDS OF HEALTH OF NORTH AMERICA.—The thirteenth annual meeting of the Conference of State and Provincial Boards of Health of North America will be held in Detroit, Michigan, August 9, 10 and 11, 1898.

The Quarter Centennial Celebration of the establishment of the Michigan State Board of Health will be in progress at the above-named time. This will, undoubtedly, add greatly in every way to the success and profit of the conference.

The usual conference work will begin on the morning of August 10. Headquarters will be at the Cadillac Hotel.

After the meeting, it is expected that the sanitarians from outside of Michigan will be given free transportation to various summer resorts. Therefore, it is hoped that all will come prepared to spend at least a week in Michigan.

The first day, August 9, will be given to meeting with the Michigan Quarter Centennial Celebration in effecting organization and hearing reports of committees.

The second day will be given to the subject proposed by Dr. Baker, of Michigan, as follows: "Each State and provincial board of health has some principal line of work which reaches nearer perfection than does the work of any other board along that particular line. I therefore suggest that the topic to be presented by all the boards represented at the conference be as follows: *'What Are the Principal Lines of Work of Your Board? How Is Each Accomplished? What Modification, if any, Does the Experience in Your State Suggest?'*"

Every board represented in the conference is expected to present, through its delegate, written replies to the above questions so far as it can. These reports and discussions and reports of committees will consume the time of the morning, afternoon and evening sessions of August 10.

The third day, August 11, will be given to discussion of the *various phases relating to the restriction and prevention of tuberculosis*. The phases proposed are:

I. Etiology: (a) Direct cause—tubercle bacilli; (b) indirect causes. (1) Inherited predisposition; (2) depressed physical condition from bad hygiene, lack of physical culture, other diseases making favorable soil, etc.

II. Morbid anatomy: (a) Showing its multifarious lesions affecting almost every organ of the body. (NOTE.—It seems proper to discuss this phase because the general public knows little of the ravages of tuberculosis except concerning the lungs.)

III. Statistics. Showing the proportion of: Pulmonary diseases in man due to tuberculosis, intestinal diseases in man due to tuberculosis, diseases of bone and joints due to tuberculosis, diseases of kidneys due to tuberculosis, diseases of skin due to tuberculosis, diseases of nervous system due to tuberculosis, diseases of lymphatic system due to tuberculosis.

IV. Identity of tuberculosis in man and animals and its wide distribution among the latter; also its communication to man through food.

V. Economic phases: (a) What is the annual pecuniary loss in the United States due to tuberculosis in man and animals? (b) Does it, in any way, interfere with commerce and the public defense?

VI. How may tuberculosis be prevented? (a) Care of expectoration; (b) disinfection of houses, public buildings, cars and steamboats; (c) prevention of sale of tuberculous milk and meats; (d) ventilation and outdoor life; (e) reporting cases; (f) how may the objections of physicians and people to reporting tuberculosis be overcome? (g) State and municipal care.

A programme with the names of the readers of papers on the above subjects, and the names of those who will be specially prepared to discuss said papers, will soon be ready for distribution. General discussion of all papers will follow the specially prepared discussions.

TRANSPORTATION.

The Transportation Committee of the Michigan Quarter Centennial Celebration has secured a rate of one fare and one-third throughout America. Pay one fare when ticket is purchased and ask for a certificate.

DETROIT HOTEL RATES.

Barclay Hotel.....	\$2.00
Hotel Cadillac (head-quarters).....	3.00 to 5.00
Hotel Detroit.....	1.25 to 1.50
Gels' Hotel.....	.50 to 1.00
Griswold House.....	2.00 to 3.00
Library Park Hotel....	.50 to 1.00
Hotel Normandie.....	2.00 to 3.00
Russell House.....	3.00 to 5.00
Hotel Ste. Claire.....	2.50 to 3.50
Wayne Hotel.....	2.50 to 3.50
Chiera's Hotel.....	1.00 to 1.50
Richter's (German) ....	.75 to 1.00

REPORT OF THE HEALTH DEPARTMENT OF CINCINNATI. — Following is the statement of infectious and contagious diseases for week ending May 20, 1898:

	Cases.	Deaths.
Measles.....	33	1
Diphtheria.....	8	1
Scarlet Fever.....	4	..
Typhoid Fever.....	4	3
Phthisis Pulmonalis.....	7	6
Membranous Croup.....	..	1
Pertussis.....	6	3

Total..... 62 15

The mortality report for the week ending May 20, 1898, is as follows:

Croup (membranous).....	1
Diphtheria.....	1
Measles.....	1
Typhoid Fever.....	3
Whooping-Cough.....	3
Other Zymotic Diseases.....	6—15
Cancer.....	6
Phthisis Pulmonalis.....	6
Other Constitutional Diseases....	7—19
Apoplexy.....	3
Bright's Disease.....	2
Bronchitis.....	8
Gastritis and Gastro-Enteritis.....	4
Heart Disease.....	8
Meningitis.....	8
Nephritis.....	2
Peritonitis.....	2
Pneumonia.....	10
Other Local Diseases.....	12—59
Deaths from Developmental Diseases..	13
Deaths from Violence.....	9

Deaths from all causes.....	115
Annual rate per 1,000.....	14 76
Deaths under 1 year.....	26
Deaths from 1 to 5 years.....	17—43
Deaths during preceding week.....	107
Deaths corresponding week 1897.....	108
Deaths corresponding week 1896.....	104
Deaths corresponding week 1895.....	89

THE McDOWELL MEDICAL SOCIETY.—At the last meeting of the McDowell Medical Society an election of officers for the ensuing year took place, with the following result:

President—Dr. H. D. Hinckley.
Vice-President—Dr. W. I. Goodin.
Secretary—Dr. S. C. Swartzel.
Treasurer—Dr. R. H. Whallon.

The society was entertained at the home of the retiring President, Dr. F. H. Rowe, with an elegant banquet, after which it adjourned to meet at the call of the President. The history of this society for the past year has been exceedingly gratifying, and the outlook for its future all that its friends can wish.

Society Reports.

OHIO STATE PEDIATRIC SOCIETY.

Care of the Eyes of Infants At or Immediately After Birth.

At a recent meeting in Columbus of the Ohio State Pediatric Society, among other papers of interest the subject of "The Care of the Eyes of Infants At or Immediately After Birth" stimulated considerable discussion and general interest among the members of the society. As the subject is one for general interest, we give a brief synopsis of Dr. Robert Sattler's paper and its practical features to the practitioner, based as it is upon a practical experience of many years.

Dr. Sattler calls attention to the fact that among the self-styled and graduated midwives, and even among physicians, there are many who regard as fanciful and exaggerated the warnings concerning the dangerous sequences of neglected ocular lesions of the newly-born. This class argues or assumes that inflamed eyes at birth or during the first days or weeks are not dangerous, and require no other treatment than the rigid exclusion of light and air, bathing with weak infusions of indifferent teas, breast milk or the liberal use of saliva from the mother or nurse, and occasionally the local instillation of the mother's urine, together with the application of poultices, etc. It is contended that this treatment is generally successful, and numerous cases are cited in which, after weeks of the most profuse suppuration, the eyes recovered without serious and sometimes without any damage. That recovery ensued is not wonderful, but that it came about in spite of this most irrational and reckless course is, indeed, so. It is true that a large percentage of these cases terminate favorably; it is also true, however, that a smaller percentage end disastrously as the result of this course of treatment. Moreover, it must be admitted by those of us who see these sad cases when it is too late that the disastrous consequences could

have been prevented by timely interference of the right kind.

The attitude of the unintelligent contingent referred to is in defiance to the teaching and experience of specialists and progressive obstetricians. It is undeniable that formerly this disease of the new-born furnished the cause for a large percentage of cases among the inmates of foreign and American institutions for the blind. It is equally certain and supported by crushing evidence, that ever since more painstaking care was practiced in the cleansing of the eyes at or immediately after birth (with or without the use of antiseptic solutions) the spread of one of the most disastrous affections of the eyes was effectually checked, and in those cases in which prompt treatment was resorted to the inflammatory disturbance was more effectually and speedily modified.

Considering, in addition, that no disease is more amenable to treatment, that none responds more promptly to the proper remedies used in the right way at the right time, than "blennorrhea neonatorum," it is evident that a physician who is indifferent to the real dangers and who refuses to avail himself of the opportunity afforded in every case to relieve or modify favorably the progress of the disturbance, justly deserves the most stinging blame and censure. To avert carelessness on the part of midwives, monthly nurses, etc., aided by the indifference of some practitioners, and to ward off countless repetitions of the baneful results and unnecessary mistakes of the past, the most stringent legislation only can avail.

The suggestion is offered that after a safe delivery every physician, just as conscientiously as he gives his personal attention to the umbilical cord and other matters, should consider it his duty to examine the eyes of the newly-born, and never trust unquestionably to the statements of the mother or attendants concerning them. The same rule holds good if, shortly after birth, the evidences of an inflammatory disturbance of the eyes manifest themselves. Immediate inspection of the eyes by the attending physician is imperative. No one is justified in taking for granted that all

that is necessary is some stronger astringent entrusted to the nurse, together with systematic bathing and cleansing. Now if ever is the time for the introduction of remedial measures, prompt local or topical applications made by the physician.

In the instillation of the remedies resorted to for antiseptic purposes, or for the neutralization of possible infectious material during parturition, caution must be exercised. It is preferable for inexperienced persons to apply the remedy by means of a brush instead of a dropper, lest the solution is dropped directly on the cornea or unnecessary abrasion follows in careless attempts to open the lids of a crying and struggling infant. A better way is to avert the lids and apply a 2 per cent. solution of nitrate of silver with a soft, clean camel's hair brush to the exposed surfaces of the conjunctiva of upper and lower lids. After this the eyes can be flushed and relieved of any excess or superfluous portion of the fluid by the aid of the brush and sterilized water or salt solution. This should be followed by cold applications and bathing with weak antiseptic washes as long as necessary.

In conclusion, the important questions suggested by the Crede method are briefly considered.

Shall we urge its enforcement in all cases, and assume that the danger of infection is present in every case of parturition?

Shall the preventive method, because of the good it unquestionably accomplishes in lying-in wards of general hospitals, maternity hospitals, infirmaries, and amidst the ignorant and poverty-stricken classes, also be resorted to in private practice among the better classes, who command the services of skilled and progressive practitioners and live among the most favorable home surroundings?

Shall a physician who fails to adopt the practice of prevention among his private patients be regarded derelict in his duties for the reason that he exposes his patient to the possible danger of an acute blennorrheal inflammation of the eyes?

On the other hand, we may ask: "Shall the prophylaxis, on account of the violent traumatism that it excites in some cases, or because it is resorted to in a careless manner by an inexperienced person, be considered with prejudice, referred to as dangerous, or be entirely abandoned?"

Furthermore, as we can only assume the possibility of infection in the largest number of births, especially in private practice, are we justified in giving discomfort and exciting perhaps a violent reaction, or even a destructive inflammation, by its use in unskilled or careless hands, simply to err on the side of safety?

Shortly after Crede's method received recognition in this country I commenced the use of this prophylaxis during my service at the Cincinnati Hospital, and put it to the test whenever my opinion was asked, and during the years which followed, became convinced of its efficacy as the most successful preventive. My experience leads me to say that among the ignorant, poverty-stricken classes and among women in maternity wards of hospitals, etc. (the place of refuge for so many with whom promiscuity of sexual intercourse is the rule rather than the exception, and venereal disease or vaginal disease common), it is the only safeguard, and should be practiced without exception.

In private practice, in such cases in which the physician has a right to suspect a vaginal discharge, or is told of its presence or has other knowledge of a genito-urinary disturbance, or is informed or knows that a blennorrheal inflammation occurred after former births, specialists and practitioners should advise it as an imperative act of expediency.

On the other hand, in private practice, among favorable surroundings and good health on the part of the mother, it will devolve upon the judgment of the physician and the attitude of the parents whether the method is to be practiced or not.

Knowing from experience that violent traumatism is excited in exceptional cases, notwithstanding this I should

never hesitate to resort to it myself, nor would I advise others against its use, well knowing that instillations made by skillful hands and with the necessary precaution can only excite at the worst a passing disturbance, if no good is accomplished. At the same time I cannot give my unqualified indorsement of its invariable practice, for the reason that if employed in a careless reckless manner it is often the means of doing irreparable harm. In other words, it is evident the main objection to the preventive method is directed against its abuse, and not against its proper and careful use.

Primary Tuberculosis of the Rectum.

Straus publishes an interesting article on this subject (*Mathews' Quarterly Med. Journal*) in which he reaches the following conclusions:

Primary tuberculosis of the rectum is not so infrequent as some of the leading authorities have taught.

It is a surgical disease as much as is appendicitis.

It is not and cannot be diagnosed by the clinical symptoms as given by the various writers on diseases of the rectum.

The only scientific and correct way of making a diagnosis is by the use of the microscope.

By thorough curettement or excision, or both together, with cautery, it is not only cured but remains cured much more often than the teaching of the authorities would have us believe.

Some of the apparently hopeless cases are cured by repeated operations.

All suspicious cases should be submitted for microscopical examination.

Local treatment is not equal to curing these cases; permanent results are to be had by a radical destruction of diseased tissue or the habitat of the tubercle bacilli.

These cases are and have been cured, and that sufficient time has elapsed for us to conclude that they will remain cured.

Early and repeated operations if need be are imperative, if these cases are to be permanently cured.

Selections.

FROM CURRENT MEDICAL LITERATURE.

Observations Upon the Treatment of Some Cases of Neurasthenia.

That chalybeates, more especially the *organic* salts of iron, constitute an essential indication in the successful treatment of some cases of neurasthenia, especially in the female, where functional menstrual derangements exist, is to my mind *an indisputable fact*. They produce conditions, oftentimes not attainable by the inorganic preparations for many reasons, which experience and reflection clearly demonstrate.

In a recent clinical study of this affection, my conclusion, as above stated, is fully justified and corroborated by the microscopical blood examinations conducted by my esteemed and skillful friend, Dr. C. Fisch. The cerebro-spinal anemia is a frequent important concomitant, if not an essential etiological factor of neurasthenia, I hardly think admits of cavil.

The clinical histories of numerous cases were compiled by my son, Dr. Keating Bauduy, chief of the Neurological Clinic at St. John's Hospital, under whose direct supervision the investigations were conducted. That the ratio, or number of red blood corpuscles, and the percentage of hemoglobin were deficient in the normal standard of these cases, prior to the treatment, is *incontestable*, as shown by the microscope. That several of the cases investigated have shown marked improvement, even after one or two weeks' treatment, is moreover revealed in the same manner, and which for rapidity of effect is quite an exceptional, if not a startling therapeutic result, when compared with some of the prior and more established methods of treatment. That many of these cases presented unmistakable evidence of satisfactory improvement, from both a subjective and objective standpoint, was quite as notable as the permanent character of their general amelioration. That the ordinary tonics had

in some instances been administered with nugatory results, while pursued along the old lines of authoritative medication, seems quite manifest.

My only explanation of the *surprising results* in the cases mentioned, where the usual officinal class of remedies had formerly been ineffectually essayed, was the superinduction, as is so frequently the case of disturbed digestion and assimilation; results but too familiar and disappointing to profession experience. Aside from the disturbances just mentioned, the development of headache, constipation, etc., frequently obviate their further administration.

When a few years ago, my attention was called to Gude's preparation of "*Liquor Mangano-Ferri Peptonatus, Gude*," (Pepto-Mangan) so extensively used and highly extolled in Germany, with my usual antipathy for new remedies, I reluctantly gave it a trial, anticipating that I would necessarily have to combat the usual disappointing effects of most of the other preparations of iron. The results, however, were *indeed a surprise to myself*, for the concomitant deranging sequelæ were so slight, that but in very few instances in my extensive utilization and experience with this special pharmaceutical preparation was I obliged to discontinue it. My experience having led me to believe that iron and manganese in combination are both indicated in the vast majority of cases of neurasthenia, this particular remedy, *I am now convinced, will prove a great boon both to the patient and the physician*. While it is maintained by some that in the hemoglobin of the red blood corpuscle manganese is present, as well as iron, I have for many years procured results with a combination of both, not directly obtainable with one alone. We know, however, that manganese gives off oxygen to a greater degree than iron, and it has been argued that for this reason its internal exhibition might correspondingly increase assimilation.

Dr. Fisch's microscopical report shows that the increase in the percentage of hemoglobin, in many of this

series of cases, is far in excess of the proportionate increase of the red blood corpuscles. *This fact I deem of greater importance as to the effectiveness of the medicine*, because the count of the blood corpuscles is to a certain extent relative, and the size varies greatly in different cases, and for other reasons the same amount of blood plasma contains different numbers of red cells; hence I would particularly lay stress upon the proportionate increase of the hemoglobin as the more important factor. The *notable and astonishing improvement* of these cases, when placed upon this preparation, led me to their closer scrutiny, as well as microscopic observation. Before concluding, I *wish particularly* to call attention to the fact of the absence of digestive disturbances and necessary consequent interference in the assimilation. All other unpleasant complicating results were notable by their absence. Of course, we do not consider the remedy applicable to cases of lithemic neurasthenia, nor in any manner a *specific* in any variety of neurasthenia. In many cases the addition of arsenic and strychnia greatly increase the efficacy of the preparation. I must also take cognizance of the salient fact of the rapidity with which a large number of female neurasthenics, under our treatment, who have suffered with marked functional menstrual derangements, have attained a normal condition under the administration of *this most elegant combination of iron and manganese*.—J. K. BAUDUY, M.D., in *Med. Review*.

Chronic Gonorrheal Vaginitis and Its Treatment.

O. Bodenstein (*Deutsche med. Wochenschrift*, October 14, 1897), in an article on the above subject, holds that the chief seat of chronic gonorrheal colpitis is in the posterior vaginal fornix, and that this locality, and not the urethra, is the primary seat of infection. Inasmuch as the urethra is almost invariably involved, most authors have considered it to be the starting-point of the process.

He quotes the following clinical data from Säger for the establishment

of the diagnosis of chronic gonorrheal infection:

1. The history may reveal (a) gonorrheal ophthalmia of one or more children; (b) former ardor urinæ; (c) the presence of gonorrhea in the husband.

2. Bartholin's gland may be diseased. A petechial purplish-red area about the orifice of the ducts is characteristic. The "gonorrheal macule," which may be present on both sides, with a reddening of the orifice of the urethra, is especially suggestive.

3. When fistulæ, abscesses and cysts of Bartholin's glands exists the evidence is conclusive.

4. Condylomata upon the vulva.

5. Dark-red spots upon a yellowish-white-streaked base about the vaginal orifice.

6. Erosion of the external os of the cervix.

7. In chronic gonorrhea local application of 50 per cent. solution of chloride of zinc to the vaginal mucous membrane will bring granulæ into sharp relief.

8. The uterus and appendages may be involved.

In treating the condition irrigations with strong solutions of bichloride and carbolic acid should be practiced by the patient while in a recumbent position, with the bag at an elevation of from three to five feet. Special attention is called to the advantage of making use of the air in the douch-nozzle to distend and balloon out the vagina, as in this manner all the folds and irregularities in the mucous surface are removed, and the entire surface becomes accessible to the irrigating solution.

The paper, however, is directed chiefly to those cases in which irrigation treatment has proven unsuccessful. As in the disease in the male urethra, chronic gonorrheal vaginitis is a deep-seated process, and the micro-organisms are situated in the submucosa, so that they are but slightly affected by irrigation, especially as ordinarily practiced.

Since in the treatment of chronic urethritis in the male large sounds are used, which distend the affected areas, mechanically bringing the gonococci nearer to the surface, and exciting in-

creased secretion, which is controlled by local application, he reasons that an analogous line of treatment can be followed with advantage in the female.

He therefore employs, in chronic vaginitis, a firm tamponade in the upper half of vagina which completely fills in the fornices. Glycerine is placed upon the tampon to soften and desquamate the abnormally thick, horny layer of epithelium, and to wash the gonococci nearer to the surface, which it does by establishing an exosmosis by virtue of its hygroscopic properties.

At the end of twenty-four hours the tampon is removed, the secretion, which is increased in amount, wiped out, and a local application made of a solution of nitrate of silver, varying in strength from 2 to 20 per cent.

The same course of treatment is then repeated and an early cure usually obtained, unless the seat of infection has extended into the tubes.—*University Med. Magazine.*

Constipation and Renal Phenomena.

Kohler, in his remarks on the connection between constipation and renal changes, at the "Gesellschaft der Aertze," said that diarrhea was the usual precursor of albuminuria when hyaline and epithelial casts would be met with. If the visceral phenomena receded favorably the renal disturbance would also disappear. Kohler recorded a number of constipation cases which had fallen into a chronic condition of dysentery, and in every one the renal connection was present with albumen and casts. He related how Professor Englisch had observed this phenomenon some years ago in cases of incarcerated hernia when albumen was invariably present accompanied by casts. Kohler attributed this morbid change to the effects of toxine which acted on the vaso-motor and reflex apparatus.

Englisch here remarked that his experience of these renal disturbances only extended to occlusions of the bowel where the contents of the canal were forced to remain for a very long time. In cases of omental hernia he never met with albuminuria.

Halban said he had made extensive

observations in this subject, but never met with albuminuria, or any other renal morbid changes in simple constipation. He therefore assumed that Kohler's cases were those where complications existed.

Kohler thought the accompanying pain pointed to a reflex action.—*Vienna Cor. Med. Press and Circular.*

The Prognosis in Cardiac Disease.

The attention which has of recent years been paid to prognosis in heart disease, and the increase of our knowledge with regard to it, has led me to its choice as the subject for discussion this evening. Notwithstanding the progress which has been made, the prognosis in cardiac disease is still probably one of the most difficult questions in clinical medicine. The fact that some of the most serious and suddenly fatal forms of disease are at times preceded by so few symptoms will always make it difficult to foretell the result in this class of cases. In the first half of life valvular lesions are the result of endocarditis, and the prognosis during the attack depends largely upon the nature of the infective agent. If endocarditis occurs during an attack of rheumatism the immediate prognosis is favorable, but the liability to the occurrence renders the future more uncertain. Endocarditis, which results from scarlatina, is not likely to occur. The prognosis in endocarditis, due to other infective agents, depends largely upon the particular micro-organism present, as well as the resisting power of the constitution; it also depends largely upon the treatment adopted and upon the behavior of the patient. A few moments of overexertion during any stage may very much increase the gravity of the prognosis. Little reliance can be placed upon the volume of sound in aortic stenosis. The presence of dizziness and attacks of fainting are signs of cerebral anemia, and therefore of a more serious lesion.

The prognosis in mitral stenosis is not so favorable as in regurgitation, first, on account of the tendency of the opening to become smaller; second, in mitral regurgitation the force of the

right ventricle acts in two ways; it resists the reflux into the ventricle, and fills the ventricle more rapidly in diastole. The prognosis of stenosis is not so favorable as when it occurs later in life. In aortic insufficiencies, three conditions may prevent a relapsing pulse in cases of grave prognosis: (1) Aortic stenosis preventing the return of blood to the heart; (2) the failure of the heart muscle, on account of which the blood is not propelled with sufficient force to produce a collapsing pulse; (3) the loss of elasticity may prevent our noticing the collapse. Irregularity of the pulse, both in frequency and in force, occurs in the latter stage of the disease. Enlargement of the liver, venous stasis, edema, albuminuria are, of course, unfavorable symptoms. If these conditions have been caused by overwork, or if rest is followed by a decided amelioration of symptoms, the prognosis is more favorable. The social condition of the patient may be an important factor. If he has plenty of means, and the wish to take proper care of himself, he will probably live much longer than one who has to struggle to support himself and family. Personal habits play an important part, especially the use of tobacco and alcohol. I am firmly convinced that the deleterious effect of the use of tobacco is much underestimated, and that it is frequently the cause of serious changes in the heart. Alcohol has an injurious effect, especially in the production of arteriosclerosis.

It may be stated, by way of conclusion, that the patient of regular habits who does not use tobacco; who is either a total abstainer or a very moderate user of alcohol, possessing an even temper; whose calling requires a moderate amount of regular exercise; who lives among healthy surroundings; who has freedom from worry, is one who, other things being equal, stands the best chance of long life. Sex has an important bearing. Mitral stenosis occurs more frequently in the female, and aortic insufficiencies in adults. Broadbent says: "When the valve disease comes on in childhood, girls break down at the period of puberty more often than

boys."—J. H. GRAHAM, M.D., in *Canadian Practitioner*.

How to Find the Gonococcus.

Prof. J. A. Wyeth, of New York, writes in the December *Polyclinic*:

Place a small drop of the discharge upon a cover-glass and smear by rubbing two cover-glasses together; dry it by passing one of the cover-glasses with pus side upward through a spirit-flame two or three times; immerse this at once in a solution of methyl-blue; wash off the excess of coloring matter by holding it under clean running water, or by dipping the glass several times into clean water; dry the stained pus well by pressing with blotting paper, then cover it with a small drop of cedar oil; put on a thin cover-glass and examine with a lens magnifying from 700 to 1,000 diameters. The peculiar double bean shaped arrangement of the diplococci will be seen within the protoplasm of the pus corpuscle and epithelium.

Prevention of Gonorrhea.

Von Neisser (*Centralblatt f. d. Krankh. d. Hard. und Sex. Org.*, bd. vii, h. 1, 1896) has theoretically confirmed the method of preventing gonorrhea advocated by Blokusewski-Daum. This method consists in dropping into the meatus, the lips of which are held open, two drops of a 10 per cent. solution of nitrate of silver. One drop is allowed to run over the frenum. Fifty patients adopted this treatment without experiencing the least irritation. Five seconds' application of this solution always inhibited the growth of the gonococcus when cultivated in artificial media. Weaker preparations are unreliable.—*Therapeutic Gazette*.

CHARLES CHAUNCEY, the second president of Harvard College, graduated in both divinity and medicine at Cambridge, England, and is said to have been of the opinion that there ought to be no distinction between them, educating his six sons in both professions.

URINARY incontinence is one of the earliest subjective signs of falling of the womb.

Translations.

MILITARY SURGEONS.

The Medicine of Armies—Medicine of Crowned Heads—History Preserves the Memory of Many of Them—Examples to Imitate—Examples to Avoid.

BY T. C. M.

While ever principally occupied with the details of the daily treatment of diseases, practical medicine has from the beginning endeavored to preserve the lives of men. Theoretical medicine will forever compare the different methods, discuss, combine and strive to clear up vexed problems. These two sisters, practical and theoretical medicine, walk hand in hand, supporting the ordinary medicine with the theories that are in vogue from time to time. The military surgeon and general practitioner are one. History has preserved the names of all the doctors attached to the staffs of great warriors and conquerors. We know the confidence Alexander showed for Phillip, his physician, against whom slander had hurled its venomous darts. Alexander, by an effort of genius comparable to his most valorous exploits, did not hesitate to swallow the medicine prepared for him by Phillip. The entire army rendered homage to the grandeur of the conqueror's soul and the virtue of his doctor, who stood with eyes of all the courtiers fixed upon him.

Homer has transmitted to posterity the picture of the condition of military surgeons in speaking of Podolarius and Machaon. These two sons of Æsculapius distinguished themselves in the army of the Greeks at the siege of Troy; they enjoyed the honors given great chieftains; they even received marks of enormous distinction, since they were exempt from all taxations. It was only just they should have been recompensed (let us not think of them as myths now) for the services rendered the sick and injured. Their fees were paid in bulk and fixed for all time, so they had to submit to no petty details from the pay-

master while on the march or in the field. Podolarius cured the daughter of King Damvetus, who then gave her to the good physician in matrimony. Temples were erected to his memory; it is even pretended that he founded schools of medicine, from which those of Cos subsequently sprang, that seven or eight centuries after counted Hippocrates among their disciples.

It is to be wished that the progress of medicine from the time of Podolarius to that of Hippocrates might be compared with that made by the healing art in the same space of time in other places. Our schools or our universities are too modern to compare with those of the epoch of Podolarius, yet the day will come when modern faculties will be as ancient and little known as the schools of Podolarius and the much later Hippocrates. Some day our medicine will be as altogether mythical.

Machaon died of his wounds at the siege of Troy, as how many myriads of later medical heroes have perished in field and camp; he cured others but was not saved himself, the sad irony of every good doctor's fate. They placed Machaon in the ranks of the gods. Apotheosis then was as common as are the historical eulogies of the present and past centuries.

The name of Machaon afterwards served to characterize physicians as *of the race of Machaon*. The vulgar proverb, "Physician, heal thyself," was doubtless used on the occasion of his death, and the same old proverb is applied to the modern doctor.

Polycletus, a physician who lived before Hippocrates, distinguished himself by his attachment to Phalaris, the tyrant of Agrigentum; he made it his duty to not conspire against a prince who had confided in him, although an endeavor was made to induce him to commit such a crime. So Phalaris marked his gratitude to his physician in a manner creditable to medicine. "It is rather," said Phalaris, "the art of a god than a man. The conduct of Polycletus is away beyond my praise!" Such eulogies of patients to the healing art are not uncommon.

Euriphon, a native of the Isle of

Cos, was physician to Perdiceas, fourth King of Macedonia, and author of the "Sentences of Gnyde," that did not please Hippocrates. Can it be possible that Hippocrates, who was from the Isle of Cos, like Euriphon, showed he was a man and physician by getting out of humor with his compatriot?

Iccius, of Tarentum, almost a contemporary of Hippocrates, was so much attached to the laws of diet that his sobriety degenerated into a proverb; they called a frugal meal the repast of Iccius.

Many other physicians have originated apothegms of the same kind, but it has not always been the sobriety of doctors that has given rise to popular remarks; to the contrary, there have been many men in the ranks of medicine who were gourmands. Yet there is good reason to believe that many doctors who have been classed as gluttons have gained their reputation from the ill remarks of patients who had been placed on low diet and hated to have their physician eat.

Thessalus and Draco, sons of Hippocrates, practitioners of great reputation, had all the virtue of their father. Draco had a son Hippocrates, who was physician to Roxana, wife of Alexander. It cannot be said of the three doctor sons, children of this Hippocrates, that eagles to not engender doves, for even the children of illustrious sires degenerate sometimes in virtue.

Dexippius of Cos, disciple to Hippocrates, had the happiness in seeing himself imitated, so to speak, by making the law for a prince. Hippocrates did not wish to go and treat the King of Persia, and Dexippus did not wish to treat the children of the King of Cairo, who was making war against the country of Dexippus, except on the condition that there should be peace between the two nations. How happy it would be were modern doctors thus able to cut wars short! Yet even in modern times the generals of two great opposing armies loan each other the use of their military surgeons.

Apollonides, physician to the daughter of Artaxerxes, King of Persia, committed a crime against this princess,

Amytis, and was put to death for slighting female royalty after receiving its favors. But perhaps this crime is too much enlarged upon by a *confrère* of Apollinides, one Ctesias, who has fully written out the history of this unfortunate amour. Perhaps, for the benefit of medicine, Ctesias should have paid less attention to history.

The same oblivion might have been given to the fate of Vectus Valeus, a physician condemned to lose his life by the Empress Messalina, and of Eudemus, physician to the court, who corrupted the young Livia.

Medicine has ever had its bad and even criminal subjects, as well as its virtuous men and the saints. But there is more virtue, take it all in all, in the medical than in any other of the learned professions.

Who will ever forget Voiranngius, the physician, who was assassinated by one of his *confreres*, who had disputed with him about an anatomical discovery? Trosias and Alexias were known by the Greeks as the doctors who held the secret of dying without pain. It was a singular idea for physicians to teach people how to die. It is said, however, they only gave this remedy to patients who were so far gone already that they could not come back to explain how the wonderful elixir of Trosias and Alexias worked. These physicians, like Paracelsus and some others, also boasted of a remedy that made all those who took it immortal. What risk is there in such promises? After all, they knew mankind—the ever-wise masses of humanity who run, with the strongest faith in the world, after promises no less wanting in common sense.

Olimpius, physician to Cleopatra, never made as much noise in the world nor as many promises as did Trosias and Alexias, but it was strongly suspected that Olimpius knew the secret of the aspic or the poison that the unfortunate and beautiful queen so willingly used in voluntarily putting herself to death.

Democedes, a physician who lived about three centuries after the foundation of Rome, was made prisoner of war by a general of Darius, with Poly-

crates, tyrant of Samos, whose esteem he seems to have merited. He distinguished himself above all the other prisoners of war by curing Darius of a sprain that he received while dismounting from his horse. He was well treated thereafter at the court of Darius, who gave him such a large sum of money that a slave was enriched by the pieces of gold that fell from the physician's saddle-bags. This shows that Democedes cannot be classe among avaricious doctors.

Apollophanes, physician to Antiochus the Great, King of Syria, was greatly honored for having discovered a conspiracy against His Majesty. The physician deemed it his duty to reveal the plot that he had discovered in an indirect way.

Antictius, physician and friend of Julius Cæsar, closed the wounds of the latter after he had been stabbed. This was an act of humanity as well as one of great courage. He did the duty regardless of political consequences, as he himself might have been accused of being the slayer of Cæsar when found near the Emperor's body. Many regarded this act of Cæsar's physician as highly imprudent.

Herophilus, a physician living in the days of Cæsar, was greatly loved by the soldiers, who, in a revolt, declared the doctor to be their chief. He was punished, and probably deserved it.

Antonio Musa, physician to Augustus, was honored with the title of Roman knighthood for having cured the Emperor. He then had the misfortune to lose the young Marcellus. Here is one of the inconveniences of medicine; those who exercise the greatest care often run the danger of losing all professional reputation by accident.

Silva said that doctors wage the battle of life in a dangerous manner to themselves; they may capture the most important citadels of disease and the public pays but little attention; they may lose a broken-down tenement, and behold! their laurels are withered. Hippocrates has well remarked: "A physician's life is full of tribulations, for the reason that he occupies himself in attending the misfortunes of others."

Callianax, proud and austere physician, is known, through Galen, as having responded to a patient who quitted life with regret. "Patroclus is dead; who values thee as well?"

Callimachus, who was physician to the Imperial Guards, had a singular pretension as historian; he said that it was a thing for doctors to write, "because they are the disciples of Æsculapius, who was the son of Apollo—that is to say, sons of the father of science and protector of the muses." This reasoning of Callimachus was ridiculous, but was not his personal pretension much more so?

These examples suffice to give a slight idea of the part played by physicians in the palaces of ancient warriors and kings. Coming down to later periods of time, a whole volume could be filled with the names of those doctors who knew the intimate inner lives of royalty.

For instance, we know innumerable stories regarding the physicians of

Philip Augustus, St. Louis, Philip the Beautiful, Charles V, Charles VI, Charles VII, Louis XI, Francis I, Henri II and Louis XIII, all doctors of the Paris Faculty. Who has not read the many, many anecdotes related of Fagon, who treated Louis XIV in connection with Felix?

The part played by doctors among the great will ever continue to be enormous, for the rich and strong are those who ever appreciate their physician the most. It is only the ignorant masses, the ever-vulgar people, who run after the physician when they are ill and ridicule his profession when they recover.

DR. SEARLE says *veratrum viride* is of more value in croup than all other drugs combined. When it assumes a membranous form it can still be given with kali-bichloride.

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Original Articles.

PARALYSIS OF THE SPHINCTER IN THE CLAMP AND CAUTERY OPERATION FOR HEMORRHOIDS—MUSCLES OF THE PELVIC FLOOR.¹

BY JOHN H. LANDIS, M.D.,
CINCINNATI.

In all surgical procedures having for their object the radical cure of hemorrhoids, dilatation of the sphincters to the point of paralysis is recommended. The purpose of paralyzing the sphincters is two-fold. It helps to bring the field of operation into view, and is said to give immunity from pain after the operation. The generally accepted teaching of to-day is that pain, following hemorrhoids operations, is due to spasmodic contractions of the sphincters or levator ani, brought on by the irritation in wounds produced by such operations.

The methods of producing paralysis differ, but is usually one of three: Dilatation with the cone-shaped dilator of Kelly; dilatation with a bivalve speculum, such as Pratt invented; or the old-fashioned but equally efficacious method, dilatation with the thumbs.

Of the three methods, the last, dilatation with the thumbs, is probably the safest. The amount of force used is known to the operator; the resistance of the muscles is accurately determined, and rupture of their fibres is not as liable to occur as when force and resistance are determined through the medium of an instrumental dilator.

The second method, dilatation with a bivalve speculum, is probably the easiest, but carries with it the danger of a lacerated muscle from the use of undue force.

The first method, dilatation with a cone-shaped metallic dilator, would seem to be accompanied by more uncertainty as to the amount of force used and resistance offered than either of the other methods, and from the well-known tendency of bruises in this part of the body to eventuate in the formation of pus, to be the most dangerous of the three methods.

Until recently the methods of dilatation employed by the writer were with the thumbs or with the Pratt speculum. There was no difficulty in obtaining paralysis of the sphincter. That this condition existed was evidenced by the patulous anal opening and by the inability of the patient to control the passage of gases. Immunity from pain, however, did not, in the great majority of cases, follow the operations. Frequently, before the patient was from under the anesthetic, pain at the seat of the operation was so intense that morphia was indicated, and its administration had to be continued for from two to ten days. The amount of pain and its duration seemed, in fact, to be almost in proportion to the amount of effort expended in producing paralysis. In two cases, which were followed by an unusual amount of pain, several months elapsed before the sphincters recovered their tone sufficiently to be trusted in an emergency.

From these cases it seemed probable that the pain did not have its origin in a partially paralyzed muscle, but in some other cause placed in operation at the time of the surgical procedure. A moment's study of the pelvic floor will

¹ Read before the Academy of Medicine of Cincinnati, April 18, 1898.

render it apparent that this part of the body is, from a surgical point of view, different from all other parts. A well-established surgical law is rest following operations. The location and function of the pelvic floor render this law inoperative, and makes even a moderate amount of rest impossible. Every movement increasing the abdominal pressure throws a weight on the bruised and lacerated pelvic floor, and with the same effect attending bruises and lacerations in other parts of the body when subjected to movement or pressure.

For these reasons it seemed probable that the desired immunity from pain was defeated by the methods employed to secure it, and a series of operations made without dilatation of the sphincters—in fact, with every precaution against dilatation—seemed to confirm the correctness of that conclusion.

Since abandoning the stretching of the sphincters in no case has it been necessary to administer an opiate. In no case has failure to sleep been due to pain. The rule, with no exception, has been absolute freedom from pain.

The method of operating consists in introducing a Pratt bivalve speculum. The blades are separated sufficiently to bring a hemorrhoid into view. It is seized with hemostatic forceps and the bivalve speculum removed. The hemorrhoid is then brought outside the bowel, the clamp fastened, and the cautery applied. This process is repeated on each hemorrhoid, and, unless the skin has been wounded in the operation, no dressing is necessary. The bowels are moved every day from the time of the operation by administering some simple cathartic. The usual enema as a method of moving the bowels has been abandoned for the reason that it seemed to be a cause of pain.

The immunity from pain in cases where paralysis of the sphincters has been carefully guarded against has been in strange contrast to the suffering of those cases in which the operator has thoroughly paralyzed those muscles. The after-treatment has been much more satisfactory, and the writer would urge upon those doing the clamp and cautery operation for hemorrhoids that

the preliminary operation of paralyzing the sphincters be discontinued.

In connection with this subject a short study of the functions of the muscles of the pelvic floor may be of interest. Anatomies and physiologies in general, and works on the rectum in particular, ascribe definite actions and functions to the muscles found in the pelvic floor. These works describe these muscles as accessory muscles of defecation, and give to each its special function during that act. The following description is taken from Kelsy's standard work on "Diseases of the Rectum and Anus:"

"The function of the recto-coccygeus is to hold the end of the rectum against the coccyx and give it a fixed point in defecation.

"The function of the ischio-coccygeus is to draw the coccyx to its own side, or, when both muscles act together, to fix that bone and prevent its being thrown backward in defecation.

"The functions of the levator ani are various. First, it acts as a support to the pelvic organs, and in the act of defecation when the muscle is contracted to open the anus the neck of the bladder is closed. In this way is explained the well-known difficulty of passing urine and feces at the same time. The muscle also aids the longitudinal muscular fibres of the rectum in their opposition to the dragging of the feces, and the anal fibres also draw the rectum upward and forward and compress it on the sides, and thus aid in the expulsion of its contents. The voluntary sphincteric action of this muscle in connection with the ischio-coccygeus is of considerable power. It is brought to bear at a point about an inch and a half above the anus, and no doubt in a measure accounts for the partial control over the passage of feces often seen after destruction of both the internal and external sphincters.

"The transversus perinei has an action in defecation. Its fibres do not always blend with those of the opposite side in the median raphe, but the two muscles are sometimes continuous, traversing the anterior extremity of the external sphincter. In such a case the two muscles form a continuous half-

ring, the concavity of which is directed backward and embraces the anterior part of the rectum, assisting powerfully in defecation by pressing the anterior against the posterior wall of the bowel in conjunction with the external sphincter."

Gray's Anatomy describes the levator ani as supporting the lower end of the rectum and vagina, and also the bladder during the efforts of expulsion, and elevating and inverting the lower end of the rectum after it has been protruded and everted during the expulsion of feces.

Landois and Sterling give its function as the voluntary raising of the soft parts of the floor of the pelvis and the pulling to a certain extent of the anus upwards over the descending fecal mass.

The above theories are accepted by authors of special works on rectal diseases, and they unquestionably convey the idea of active contraction of the pelvic muscles during defecation.

Will the evidence obtained by a study of this act in man support such a conclusion? During this act the tendency is for the coccyx to occupy more nearly a straight line with the sacrum—one of extension. In man, the movement, though slight, is downward and backward. The descent of the anus and elongation of the rectum is from a half to two inches, and it is evident that the recto-coccygeus is not in a state of contraction during this act, and therefore that its function is not to give the rectum a "fixed point" in defecation. The firm attachments of the upper portion of the rectum to the sacrum by the meso-rectum, and the lower portion to the soft parts in the pelvic outlet, render such an office unnecessary and its existence doubtful.

The direction of the fibres of the ischio-coccygeus is downward and inward. The movement of the coccyx in defecation is downward and backward, and this fact renders it apparent that this muscle cannot be in a state of contraction during this act. If it was, we would, in the downward and backward movement of the coccyx, witness the rather extraordinary anomaly of a muscular contraction resulting in a separa-

tion of its points of origin and insertion instead of their approximation. For this reason it is improbable that this muscle has for its function the fixation of the coccyx and the prevention of its dislocation backward during defecation. When the firm attachments of the coccyx to the sacrum and to surrounding parts are considered, the danger of its being thrown backward during defecation does not seem imminent.

That one function of the levator ani is to support the pelvic contents, and antagonize the diaphragm and abdominal muscles when they act upon the abdominal contents, is true with important exceptions. That the well-known difficulty of passing urine and feces at the same time is due to a contraction of this muscle during these acts is open to question.

The membranous portion of the urethra has important surgical and anatomical relations with the anterior part of the lower portion of the rectum. It is evident that during the passage of feces this portion of the urethra is subjected to considerable pressure, and that the stoppage of the flow of urine at this time is due to the mechanical pressure of feces, and not to a muscular contraction of the levator ani.

The temporary stoppage of the flow of urine, while the feces are being expelled, is less remarkable than the well-known fact that, in point of time, it is almost impossible, with a full rectum and bladder, to perform one function without the other. That the temporary stoppage is due to mechanical pressure, and not to muscular contraction of the levator ani, is proved by the fact that the escape of gases does not interfere with the flow of urine.

That this muscle aids the longitudinal muscular fibres of the rectum in their opposition to the dragging of the feces is not borne out by the evidence. As the rectum descends and becomes longer during defecation, it is apparent that its longitudinal fibres are relaxed instead of contracted, and that any opposition to the dragging of the feces must be purely passive.

The statement that the anal fibres draw the rectum upward and forward

and compress it on the sides, and thus aid in the expulsion of feces, is in direct opposition to the statement that contraction of this muscle opens the anus. It is fair to presume that if contraction of this muscle causes the rectum to descend and the anus to open, continued contraction will not draw it upward and forward and compress it on the sides and close it.

That the levator ani has a voluntary action in conjunction with the ischio-coccygeus, which opposes the passage of feces, is doubtless true, but this function is negatived by special works on rectal diseases by the other alleged function of opening the anus by contraction. Contraction of this muscle either favors or opposes the passage of feces; it cannot have both functions. It would be as reasonable to claim that after contraction of the biceps had caused flexion of the forearm upon the arm, further contraction would result in extension.

If contraction of the levator ani opens and everts the bowel, depresses the pelvic floor and favors the expulsion of feces, then relaxation of this muscle should close the bowel, elevate the pelvic floor and act as a barrier to the passage of the contents of the bowel. That this latter condition does not exist in relaxation of this muscle is seen in cases of paralysis where it is involved, when a descent of the pelvic floor is observed to the extent of partial obliteration of the anal sulcus, and where incontinence of gas and feces obtains.

It is said that the transversus perinei has an action in defecation, assisting powerfully by pressing the anterior against the posterior wall of the bowel in conjunction with the external sphincter. If this theory of the function of this muscle was true, movements from the bowel would be broad and flat—ribbon-shaped. The circular shape of the anal opening, the cylindrical shape of the feces, and the well-known relaxed condition of the external sphincter during defecation, would seem to dispose of this proposition.

Gray's Anatomy, in its description of the action of the levator ani, conveys the idea that it is in a state of contrac-

tion during defecation, parturition and micturition, by stating that it supports the lower end of the bowel, vagina and bladder during the efforts of expulsion. With the further statement that it elevates and inverts the lower end of the rectum after it has been protruded and everted during the expulsion of feces, it is not the purpose of this paper to take issue. If it supported the rectum it would prevent its descent, protrusion and eversion, and a continuance of that support could not result in a reversal of that process.

Physiologists, in describing the act of defecation, have laid great stress on the way in which the intestinal contents reach the rectum from the sigmoid flexure—greater, in fact, than the expulsion of the feces from the rectum, which in reality constitutes the act of defecation. Reasoning backward, it would seem that if this was of special importance, then it would be of equal importance to determine just how the ascending, transverse and descending portions of the colon emptied themselves. Physiologists seem agreed that this is accomplished by a descending peristaltic wave, and it is improbable that in a similarly organized piece of bowel any other force is necessary to empty the sigmoid. Having passed from the sigmoid, the fecal mass, through the force of gravity and the contraction of the circular muscular fibres of the rectum, is forced onward towards the outlet, and from its presence and weight brings on a desire to empty the bowel. By a reflex action, the contraction of the sphincters, levator, recto-coccygeus, ischio-coccygeus, transversus perinei, and the longitudinal muscular fibres of the rectum, is inhibited; relaxation takes its place. The rectum becomes elongated, the anus, bladder and coccyx descend, and the barrier to expulsion having been removed, the fecal mass is expelled by a descending contractile wave of the circular muscular fibres of the rectum. Following this, the causes leading to relaxation having ceased to operate, contraction of these muscles occurs. The levator ani, being inserted into the upper border of the external sphincter,

and assisted by the longitudinal muscular fibres of the rectum, inverts and elevates the anus to its position in the pelvic floor and the sphincters close it. In the same manner and at the same time the bladder and coccyx are lifted to their proper positions by the contractions of the levator ani and ischio-coccygeus. Contraction of the transversus perinei and recto-coccygeus lends firmness to the pelvic floor and helps to fix the position of the anus.

Important accessory muscles of defecation are the abdominal muscles and diaphragm, and it is only during the process of emptying the bowels, bladder or uterus that they are not opposed by the levator ani and other muscles in the pelvic floor. If this proposition is not correct, then all acts calling into play the diaphragm and abdominal muscles would result in a condition in the pelvic floor favoring the expulsion of gas and feces.

If the conclusions reached in this paper are true, the functions of the muscles of the pelvic floor are to support the pelvic contents and prevent prolapse of the rectum, uterus and bladder; to oppose the action of the diaphragm and abdominal muscles, except during the expulsion of rectal, uterine or bladder contents; to elevate these organs to their proper position in the pelvic cavity after expulsion has taken place; and to prevent the expulsion of gases or feces at times when their evacuation would be incompatible with good form by opposing, voluntarily, the involuntary action of the circular muscular fibres of the rectum.

[FOR DISCUSSION SEE P. 580.]

Mother's Milk in the Colostrum Period.

The common gastro-intestinal symptoms observed in the nursing infant during the puerperal period are due largely, as a rule, to an excess of proteids in the milk. The matter generally remedies itself when the mother is able to get about and exercise more, until which time it is good practice to dilute the milk by having both mother and child drink an abundance of water.—*Denver Med. Times.*

DEATHS (TEN), SURGICAL AND CAUSES.¹

BY MERRILL RICKETTS, P.H.B., M.D.,
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Believing (as I have frequently said) that more valuable knowledge can be derived from failures than from successes, I will report my deaths occurring since September, 1896, at which time I reported in the LANCET-CLINIC my previous surgical deaths—twelve in number. To those I now have ten more to add.

In the report of these cases it will be my sincere endeavor to present each case with all attending circumstances exactly as they appeared to me, and to candidly confess all errors recognized.

And before entering upon a description of the cases, I wish to again repeat that "the surgeon's sins of *commission* are few indeed compared with his sins of omission." Never yet have I used the knife when after-results told me that there should have been no surgical interference. The cry of the laity and a large number of the profession that the surgeon "wants to cut everything" is instilled by an innate horror of the knife and deaths which so often follow closely upon operations delayed until the patient is exhausted and many times lying at the very point of death.

But in all cases where surgical interference is indicated the surgeon should always give his patient the benefit of a doubt; give him a chance for his life, no matter how small that chance may be, and the fact that he will in all probability add another death to his list and be denominated "a butcher" will not excuse him from his duty.

CASE I.

Cerebral Meningitis.—Boy, eighteen months old, white, patient of Dr. Beebe. Comatose for eight days, with all allied conditions. Made opening through each parietal bone into arachnoid cavities, from which escaped large quantities of meningeal fluid. Both

¹ Read before the Academy of Medicine of Cincinnati, April 18, 1898.

arms and leg were retracted for the first time in eight days, while the child cried aloud and swallowed nourishment for the first time in eighteen hours. The urine was removed by catheter, while a natural evacuation of the bowels ensued. The patient continued to take nourishment with apparent improvement for about twenty hours, when exhaustion became more manifest, and dissolution took place twenty-eight hours after operation. During this time the escape of fluid continued in great quantities.

Here is a case which, if operated upon during the first few hours of the comatose state, would have had a good chance for recovery, for it has since been demonstrated that free drainage does enable recovery to take place.

CASE II.

Gangrene of Leg.—Hospital. Male, aged fifty-nine, German, milk-wagon driver, experienced severe pain in right foot while on ship crossing the ocean three weeks previous. He was detained in New York Bay as a pauper, and held until his brother reached him from this city. Gangrene developed in the foot and progressed rapidly until I saw him on the day following his arrival in the city. I believed that the popliteal artery was occluded, and gave a most unfavorable prognosis. Amputation of the lower third of the thigh was complete within twenty minutes; with chloroform narcosis. Shock could not be overcome, and death ensued ten hours later from exhaustion. It seems impossible for recovery to have taken place under the circumstances, especially as gangrene had manifested itself in the toes of the other foot. Examination of vessels showed complete occlusion in the amputated, and no doubt examination would have proven the other also to be so.

CASE III.

Brain Abscess.—Hospital. Boy, four years old, under the care of Dr. Rust. Had been comatose for several days, with great emaciation. Temperature was subnormal and pulse slow and full. Right arm and leg slightly paretic, as was the left face also. Left

pupil dilated, with cessation of purulent discharge from ear one week previous. The mastoid process was removed without chloroform or ether. Both posterior and middle fossæ were entered upon the left, dura incised and brain substance exposed without revealing pus. Drainage was provided for, and six hours later dissolution occurred as a result of exhaustion. An autopsy was not permitted, so that nothing definite could be determined as to the causation. This case seemed hopeless from the beginning, and the surgical interference was resorted to with such a feeling by the family and attending physicians. The mention of such a case is merely to confirm a previous statement.

CASE IV.

Double Ovariectomy.—Residence. Patient aged twenty-seven, white, married, cared for by Dr. Corliss, of Brookville, Ky. Suffered for several months with difficult urination. Adherent ovaries were discovered and cystic degeneration suspected. Patient showed signs of uremia in that her mentality was impaired. A low delirium, with temperature of 101°, loss of flesh and tenderness over supra-pubic region. Peritonitis was suspected about the appendages. Operation (chloroform narcosis) determined adherent and cystic ovaries; almost impossible to deliver them sufficiently to apply ligature. The work was done within a few minutes. The adhesions were extensive, making it necessary to actually dig them out. The hemorrhage was *nil* and the operation was without event. The ligatures were transfixed and there was hardly any possibility for hemorrhage to have occurred, nor do I think for a moment that such was the cause of death. She died twenty-four hours later from exhaustion, without any evidence whatever of hemorrhage. No autopsy was made.

CASE V.

Intestinal Obstruction (Meckel's Diverticulum).—Residence. Male, aged twenty-nine, white, had great pain in right iliac fossa while cycling on Monday evening. He became more and more

distressed, it being impossible to evacuate bowels on following day. Neither could this be accomplished at any time thereafter. I saw the patient *in extremis* on the following Saturday night at 10 o'clock. The radial pulse was hardly perceptible at this time, while the temperature was but slightly elevated. His mental condition was rather good. Immediate surgical intervention was urged, with the statement that there was perhaps but one chance for recovery in three thousand of such cases. The patient replied immediately that he wanted that chance, and wanted it quick. It did not require more than six or eight minutes to discover and divide a band extending from left to right across the iliac fossa. A rent had been made through this tissue, perhaps while riding his machine. Through this opening had passed about ten inches of the ileum, and the appendix filled with blackberry seeds. After dividing the diverticulum and removing the appendix about one and one-half gallons of fecal fluid was removed through a small opening in that portion of the small intestine which was not strangulated. The abdomen, after being wiped out with gauze, was closed without washing or drainage, and while about all resources were exhausted to overcome shock, the patient expired at the end of two hours from exhaustion.

CASE VI.

Fibro-Sarcoma.—Residence. Woman, aged fifty-four, white, three children. Dr. Savage, Germantown, Ky., visiting physician, but he had never been told of the presence of a tumor until a few days prior to my visit. History of ten or twelve years' duration. I found patient in bed, where she had spent most of her time for seven weeks. No history of bleeding. Pain severe, with great debility and loss of flesh. The tumor was round and movable, and about the size of an average adult head. Removal was advised and made on the following day, consuming about thirty minutes. The growth involved the entire uterus, perfectly round, and without any adhesions whatever. Indeed, I have never seen an unpedun-

culated uterine fibroid which offered such favorable results. Although an extensive incision was necessary to deliver the growth, no hemorrhage of consequence from any locality ensued. All of the uterine vessels were easily and rapidly ligated, and transfixed with the best silk for such purpose. The field of operation, within and without the cavity, was constantly to be seen. The anesthetic was taken exceedingly well, and given with great caution by a most skilled practitioner, while the nurse and assistants were the most experienced. The surroundings were those of a modest country home, free from contamination and with all advantages that could be desired, so that I have no reproach to offer unless it be self-condemnation, which I am not quite sure could not be given with a degree of humiliation.

The patient's condition was exceedingly good from the beginning of the operation (10 A.M.) until the following 2 A.M. (fourteen hours), when severe vomiting occurred. The abdomen, while rigid during the intervening time, did not indicate hemorrhage; neither did the pulse or general condition. But one or two small portions of morphia were required to relieve pain, so that I am not convinced that any hemorrhage occurred before 2 A.M., if hemorrhage occurred at all. Yet she died at 10 A.M. with all the symptoms of hemorrhage.

Did bleeding cause the vomiting or did vomiting cause the bleeding by detaching a ligature in any one or more of the uterine vessels? The pedicle was sutured in the abdominal incision and was strangulated by means of a strong whip cord, so that it was absolutely impossible for bleeding to have occurred from the stump. Distension, tenderness, color of skin, feeble and rapid pulse, together with delirium, all indicated the treachery of some imperfect ligation of some one or more vessels. And, although an autopsy was not secured, I feel morally certain that I am more or less responsible for this disastrous result. And yet one can fully appreciate the fact that many times fragility of tissue is wholly the

cause for the "slipping" of ligatures. This, therefore, is one of the results which may be questioned.

CASE VII.

Man, aged fifty-six, white, history of stone in bladder for twenty years. Had taken large quantities of morphia daily for many years. Consultation with Drs. Givens and Wells, of Cynthiana, Ky. Chloroform narcosis. First removed a fifteen-pound lipoma from above left clavicle, this operation, including suturing, consuming but four minutes. A median incision was made through the perineum and a soft stone about the size of a hen's egg crushed and removed, both operations consuming less than twenty minutes.

The patient did but fairly well for a few days, when it was determined that he had deceived us as to the amount of morphine taken daily; instead of one grain it proved to be five. While drainage was perfect, he gradually declined until the twentieth day, when death from exhaustion ensued. Every attention was given during and after the operation, so that I cannot in any way place the responsibility, if such exists, in this case. The gravity in operating to any degree upon morphine subjects is so well known that it would be useless to speak further upon this subject.

CASE VIII.

Gall-Bladder Rupture.—Patient was a male, aged seventeen, Italian. Dr. Cassello called me to examine a distended gall-bladder of six weeks' duration (empyema), with severe pain, icterus and emaciation. Operation refused. Two weeks later, at 6:30 P.M., severe pain, tearing sensation and collapse. Dr. Cassello was called and I followed immediately. Rupture was suspected and operation advised at once. He was taken to my hospital and operated upon at 9:30 P.M.

The rupture had taken place upon the under side, allowing about one and a half pints of empyematous fluid to escape into the abdominal cavity. This fluid was removed with the hand and gauze, the gangrenous portion excised and the cut surfaces sutured into the

abdominal wall. It was difficult to overcome collapse, the temperature remaining 96° for forty-eight hours, then gradually rose to normal. No stone was found to obstruct the common duct, nor could any cause be determined.

At the end of six weeks he could get about the house very nicely, but the stools never gave indication of liver secretion. At the end of ten weeks an attempt was made to make opening from gall-bladder into gut by means of small-sized Murphy button. This button was removed through the belly wall from bladder at the end of six days, and fecal odor was present at the time, but bile never appeared in the stools, all escaping externally. By this time there was general glandular enlargement, those of the neck being especially so. The discoloration of the skin and mucous membrane had disappeared soon after the first operation. At the end of five months (ten weeks after the second operation) another effort was made to connect the bladder and gut by using a large-sized button and closing the external opening, and while bile appeared in large quantities in the stool, a small portion escaped two days later externally. It was evident that his chances for recovery were very meager. He underwent dissolution three days later due to exhaustion. The common duct was found to be at the time of each operation occluded by new tissue, whether malignant or benign could not be determined, and, as an autopsy was not granted, never will be known. The probabilities are that the new growth was tubercular, as every indication was present. The father and mother died of tuberculosis, while at present a brother is afflicted with the same disease.

CASE IX.

Brain Abscess.—Hospital. Man, aged fifty-one, German, chronic inflammation of middle ear. Cared for by Dr. H. H. Smith, Sharonville, O. Left side paretic tongue, deviating to right. Right arm and leg slightly paralyzed, severe pain in front and base and left side of head; abscess of left cerebellar lobe was thought to exist, and meas-

ures to evacuate it were advised and accepted.

After removing a portion of the diseased mastoid tissue the temporo-sphenoidal and cerebellar lobes were exposed, together with the lateral sinus. About two ounces of meningeal fluid escaped from about the middle lobe through incision in dura. This, however, was not done until after both lobes had been penetrated with exploring needle with negative results. The cerebellar dura was not opened as I had intended, and as would have been done had not my numerous consultants opposed it. This is the first of twenty-two elective brain operations in which I did not open the dura, but relied upon needle exploration. Drainage was provided for by gauze, and the patient placed upon the "waiting" list, only, however, for a short time, for he died seventy hours later in convulsions.

An autopsy showed the presence of an abscess cavity containing one-half ounce of pus, which could have been easily evacuated had an incision been made in the dura where I had intended making it. Here is a death for which I feel greatly responsible—in fact, more than in any death in my practice. And while I was advised by most competent consultants who were present not to open the dura, I can in no way allow any degree of responsibility to rest upon them, for an operator should be a dictator. Should he not be willing to assume *all* of the responsibility, sharing success and misfortune alike, he should not do surgery. The 25 per cent. of recoveries from the evacuation of cerebellar abscess is sufficient to justify operation in all cases, and it is greatly to be regretted that I fell so short in doing my duty.

CASE X.

Man, aged sixty-nine, white, trampled upon by a horse, the lightly shod hoof striking him squarely in the face as the head rested upon the frozen ground. The toe and calks had been worn so that the shoe was practically smooth. The effect of the blow and weight was to detach and force backward both superior maxillæ into the throat. He soon regained conscious-

ness, with considerable bleeding. Dr. Townsley called Dr. Langdon and myself in consultation within two hours from time of injury. At the end of twenty-four hours his general condition had improved, except that the edema about the fauces, together with the dislodged bones, was greatly interfering with respiration and deglutition. It was therefore deemed not only advisable, but absolutely essential, to remove the fragments of bone, which was done through the contusions of the right face and palate. All of the right superior maxillary and nasal, together with the palatal, bones were removed in this way under slight chloroform narcosis, requiring but about ten minutes. Respiration was accomplished with much more ease, but he underwent dissolution at the end of twenty-four or forty-eight hours from the time of injury, due to exhaustion. There was hemorrhage from the right ear, which, together with the circumstances and condition in general, lead us to believe that there had been a fracture at the base of the skull.

In conclusion, I will say that there are but two of the ten deaths herein mentioned in which I think negligence is at all to be considered: (1) Fibrosarcoma; (2) abscess of cerebellum. But they offer enough to cause one to think the second time. It can well be said that 25 per cent. of these deaths is perhaps a fair average of those which should receive criticism from any operator, and I trust that more such reports will follow.

Cysticercus of the Skin in a Ten-Year-Old Girl.

Talotti (*Fahrbuch für Kinderheilkunde*, Bd. xlv, H. ii-iii) reports a case in which a tumor the size of a hazelnut was noticed, situated to the right of the navel, in a ten-year-old girl. The growth was easily moved, and appeared to be between the skin and the abdominal muscles. It was slightly sensitive upon pressure. The tumor was removed, and upon examination proved to be a *cysticercus cellulosæ*—*Archives of Pediatrics*.

TUBERCULOSIS: FOOD PRODUCT.

BY H. H. SPIERS, M D.,
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In the world's history perhaps no one article of food has been in more common use than milk. In early life it is the only food. As the child advances in years this food is less common, but in many lands it is still a staple article of diet. In adult life milk is commonly used, though its use is more confined to the culinary art. So in all ages and in all lands human kind is more or less familiar with milk. In recent years no one article of diet has been more vilified or decried. In some cases this judgment is just; in others, absolutely unjust. In the first place, we must remember milk is a secretion. The quality and quantity of the milk depends on the health of the animal. If the animal be sickly the milk will be deficient in quantity and poor in quality; if healthy the quantity and quality will be normal. So much for the sickness or health of the animal.

Again, the quality and quantity depend on the food given. If the animal be in a starving condition the quality and quantity of milk are alike defective. If the food given be abundant though defective in quality the animal will soon be sickly and the milk flow will correspond. If the food be abundant and of proper quality but of one kind, or a sameness, the animal does not thrive and will soon show this in the flow of milk.

Thus it is seen there are many things to consider in the proper feeding of the animal. What has been said of food is also true, in a measure, of drink. The water should always be of the best, abundant in quantity and given at proper intervals.

There is another fact that is often overlooked. In all stall-fed animals the ventilation should be of the best. Animals in the open air do not need care in this regard. Not so with those enclosed. There should ever be a free current of air passing through the enclosure. In very cold weather this should be controlled, but never entirely

closed. In closing we suspend atmospheric influence, and in this way induce disease.

No people on this earth need more teaching in this regard than the civilized of to-day. The ignorance extant is simply wonderful.

One other fact needs to be mentioned. Daily exercise should be given to the animal enclosed. This may seem unimportant; on the contrary, it is very important. In truth, its importance transcends nearly everything else.

The great danger to all enclosed animals is tuberculosis. This, we think, will be admitted by all, of whatever school of medicine.

Why is it that stall-fed or enclosed animals are predisposed to this disease? Simply look! We attempt to mirror as plain as the nose on your face: Suspension of atmospheric influence. Suspension creates a condition that allows a natural entrance to growing tubercle bacilli. Result? Tuberculosis as ordinarily found.

Enclosed animals are predisposed to tuberculosis from two causes, viz., improper ventilation and lack of physical exercise. Both conduce to suspension of atmospheric influence. Each is a river of itself. When they unite the force of the current is so great it sweeps every thing before it. Prevent the union of the rivers, each is more readily controlled. This every one should know.

To summarize, the animals should be healthy and kept so by proper food, water, ventilation, exercise and attention. If so kept, the milk is pure and all animals drinking the same will be free from disease so far as milk is concerned.

Health authorities should direct their efforts to the attainment of these ends. Stables should be investigated at all hours. The care and attention given to animals should be properly inquired into and reports made from time to time.

Venders of milk are no more honest than other people. All food supplies in which the health of the individual or community is involved should be under close inspection. "Eternal vigilance is the price of liberty."

While there has been marked advance in the care of animals during recent years, there is yet much progress to be made in this direction. While there has been marked advance in ideas as to the how and wherefore, there is still a mental hebetude past belief. While officials have been more zealous in investigation, there is yet too often a drawing of salary and a third eyelid. Political preferment accounts for much of this.

The writer stated that the animals should be healthy. Suppose they are diseased; no sick or diseased animal should furnish milk for public or private use. All such milk should be condemned.

What shall we do with the animals presuming the disease be tuberculosis? The world is familiar with the tuberculin test. To those who are satisfied with this test I presume nothing further can be said. One thing all will admit—the test does not rid us of tuberculosis. The disease is still prevalent, is still prevalent in those herds in which it has been used. Is it less prevalent in those herds? Time alone will tell. In the meantime we have the disease in our midst. It behooves us, if possible, to secure more efficient means. In this paper and elsewhere the writer has presented in his judgment a more excellent way. He awaits consideration of the same and results.

It is the object at this time to refer to one or two popular fallacies. It is a common belief that when milk from an animal is fed to another animal the second will thrive if the first be well. There are exceptions to this rule. For instance, the milk-giving animal may be well but from some sudden change in diet there is a sudden change in the milk, which will cause sickness in the one using the same. This is more especially seen in delicate children while using cow's milk. Venders of milk should be extremely careful of sudden changes in feed.

Again, milk may be changed from a shortage in pasture, the cow being obliged to eat food not injurious of itself but injurious to a milk supply. This milk may cause sickness in the other-

wise healthy child. Cows should receive extra feed when there is a shortage in pasture.

There is a belief among some that milk from a tuberculous cow may be used by all provided the disease does not invade the udder of the cow. No teaching could be more pernicious. We should ever remember that tuberculosis is a constitutional disease. Milk is a secretion—a secretion, in this case, from a diseased constitution. Such secretion should not be used.

There is another fallacy: That the one fault in milk from a tuberculous cow consists in the germs which this milk contains. No teaching is more erroneous. The fault consists in the milk being a secretion of disease. The germs *per se* cause no trouble only in certain cases to which we shall shortly refer. The principal trouble lies in the secretion, not in the germ.

Another wrong impression exists in the belief that a milk supply, however poor, may be rendered good by proper sterilization. Just think of this for one moment. A milk is deficient in fat or casein, or any other constituent. Could sterilization restore the constituent lacking? Or suppose any or all the elements of milk were impure, diseased or faulty. Could sterilization render these elements perfect? All sterilization does is to kill the microbes therein contained. Ofttimes it renders the milk more difficult to digest. If it be shown the microbe *per se* causes no injury to the milk, of what use is sterilization? It is of benefit in that it prevents fermentation, of great value when milk is to be kept.

Another fallacy is referred to which we believe is the result of education. It is thought by some that disease and germ are synonymous; that every disease has its germ; that no disease could exist without a germ; that the only proper way to treat disease is to administer germicides, etc., etc. After some reflection the writer is inclined to think there is a disease which should be named germ-dementia; that some few actually have the disease; that germ-dementia, strange as it may seem, is not caused by germs at all, but is

these out I found the aneurism intact. The aneurism was not an ideal one for the operation, since there was too general a dilatation of the arch. In the right auricle there was a rupture large enough to introduce my finger, which was the cause of death. I present this specimen because of the peculiar lesion that caused death. The common carotid has been removed high enough up to show the point at which the ligature was placed, and the subclavian was broken off just to the inner side. The cause of the rupture of the auricle in this case is rather hard to explain. We all know that these cases are not so very rare. There are some cases on record in which there has been rupture of the auricle or ventricle not due to injury, and in some instances without any apparent degeneration. There is one case in Philadelphia reported in which a man, apparently previously healthy, died of rupture of the right auricle and only some atheromatous changes of the vessels could be detected.

DR. WM. JUDKINS: If you had such a case again, would you operate?

DR. HILL: If I knew previously that the aorta was as extensively dilated as this man's, I do not think I would. Otherwise I would, for in this case there were heavy deposits of fibrin in the aneurism, which seemed quite capable of arresting its progress for a long time.

Ulcer of the Duodenum—Specimen.

DR. J. F. HEADY: This specimen is the pyloric end of the stomach and beginning of the duodenum removed from a man, twenty-six years old, who for three years had been complaining of dyspeptic symptoms. There was an occasional attack of colic. On the 13th inst., while at work, he was taken with a very severe pain in the abdomen, described by him as being on the left side. There was some vomiting and a small and rapid pulse. He went on from bad to worse. I saw him on the 14th. On making the autopsy I found the abdomen filled with gas, and an acute general peritonitis. On the upper anterior surface of the duodenum we found this opening, just at the pyloric opening.

Farther down you will notice a second ulcer, which has almost healed. That was walled off by adhesions to the transverse colon and the head of the pancreas.

Latham, in 8,192 autopsies, of which 116 were from intestinal perforation, found twelve due to this cause. In the last six years I can find a record of but sixteen laparotomies for perforating duodenal ulcer. As to sex, in Latham's twelve cases, ten were males. Kelymack's six cases all were males, and of Weir Foote's nine cases eight were males.

DR. J. H. LANDIS read a paper entitled

Paralysis of the Sphincter in the Clamp and Cautery Operation for Hemorrhoids—Muscles of the Pelvic Floor (see p. 567).

DISCUSSION.

DR. B. M. RICKETTS: I do not quite understand the gentleman; does he mean to tell us not to divulse when the clamp and cautery is to be used?

DR. LANDIS: Yes, sir; not to divulse; that is the idea.

DR. RICKETTS: Well, I would not use the clamp and cautery after I had divulsed, for I do not use the clamp and cautery. While we have a great many men who are using them, we have a great many men who are not using them. I believe that divulsion of the sphincter is a very wise thing to do in many conditions, and I believe it is a means of curing or abolishing or destroying many forms of hemorrhoids, especially the more superficial ones, particularly about the sphincter and mucocutaneous border. It is rather a new thought to me to have this material brought before us this evening, and I am not sure but it is a very good thing indeed. I can readily see where the clamp and cautery would get more fibres than if divulsion was not used. Stenosis is what we want in prolapsed rectum and in the hemorrhoidal condition. Perhaps I have made the statement here before, that Dr. Fenger, of Chicago, told me he had in a case of hemorrhoids, operated on with clamp and cautery, hemorrhage on the tenth

day, and later was called to the patient's death. I understand that Dr. Kelsey has had four deaths from the use of the clamp and cautery. It is impossible to say what vessels are caught up with the clamp, and if they are large vessels the cautery will not prevent them bleeding.

DR. A. H. FREIBERG: What method do you use, Doctor?

DR. RICKETTS: I have described it here a number of times. It is a method used largely over the country. I have a needle describing more than a half circle. The idea is to carry a kangaroo tendon. The operation was described by me some time ago, and was brought out by Andrews, of Chicago. He asked me what I thought of Whitehead's operation, and I condemned it, and afterward I was forced to bring out a paper. Since then he and his sons have been doing the operation. I find the operation has been made abroad by two or three operators, and they have spoken very favorably of it. Wiggin, of New York, has also made it. The idea is to get an operation in which there is no tissue destroyed and at the same time catch the varices. This is done with kangaroo tendon. The needle enters the muco-cutaneous border and passes up submucously. It is easier to bring the needle out at a half circle and then enter again and come out at point of entrance. I have used silver, silk-worm-gut and silk, but I find nothing better than kangaroo tendon. If it becomes infected you do not have to take it out. Any suture is more difficult to take out than to put in. You catch within the ligature all the varices, or if you like you may use more than one ligature. This is not only applicable to hemorrhoids, but you can treat the first, second and even the third degree of prolapsus in the same way. The prolapse operation can be done in two sittings. In the hemorrhoid operation once I have had to remove a small mass by ligature. With this method there is no danger of bleeding or loss of tissue. There is but little pain and no infection thus far. There is nothing but absolute destruction of all the varices incorporated in the ligature. Before this

operation is made divulsion is practiced.

DR. FREIBERG: That is an aseptic destruction of tissue, is it?

DR. RICKETTS: No; it is not a question of making them aseptic. No operation in the rectum can be made aseptic. That is one of the impossibilities. We hear men talk about making the rectum aseptic; it cannot be done, any more than you can make a sewer aseptic.

DR. FREIBERG: I have asked the last speaker concerning his method simply because my recollection of it was somewhat hazy; my object was to determine whether there is any radical difference between the method as he practices it and the old-fashioned operation of ligation. As far as I can see there is really no difference. His operation shows both the advantages and disadvantages of ligation.

Dr. Landis came to us this evening with a paper that is decidedly revolutionary in its nature, tending to overthrow a great many of the old theories as to the method by which defecation occurs and the functions of the pelvic floor. We have spoken upon this subject together, and I must say that I agree with his conclusions. It is a subject to which I have never paid much attention, but I have thought of the matter somewhat since speaking with him, and cannot help but agree with him. That abstention from divulsion, paralysis or stretching of the sphincter will succeed in relieving patients from pain entirely after operation for hemorrhoids, is a statement I cannot readily accept. I know so well Dr. Landis' habits of observation that I hesitated to ask him how many cases he had observed of cessation of pain without divulsion of the sphincter. I must say that in only two cases, to my present recollection, did my patients suffer from any particular pain, and in both of those cases I am quite sure my divulsion of the sphincter was unsatisfactory and incomplete. In one case I know why it was incomplete; it was because I did the operation in a great hurry. In the other case it was, unfortunately, because I did not bring anything with me to help my fingers, and my fingers were

tired before I began the operation. In both of those cases the patients suffered a great deal of pain. But in all my other cases, in which I took great pains to secure thorough obliteration of the contractile function of the sphincter, my patients were not troubled with the pain Dr. Landis describes. In this respect my experience agrees with the experience of those who operate chiefly in this field—namely, Kelsey and others. So I should thank Dr. Landis if he would tell us of the other cases in which he has tried this. I know we will all give it a trial. I feel that Dr. Landis' paper is a distinct contribution to the subject.

DR. H. J. WHITACRE: In regard to divulsion, my experience agrees entirely with that of Dr. Freiberg, in that there is comparative freedom from pain after divulsion. Patients do not have such severe pain after divulsion. It is true it has been my universal custom to insert a grain suppository of opium, which may have reduced the pain somewhat; but I never had the slightest difficulty from divulsion. I have always used the instrument devised by Stimson. I think one advantage instrumental divulsion has is that we can use more force. It takes a good deal of force to stretch the sphincter, and if we use the fingers we are too apt to stop short of the necessary divulsion because we seem to be using too much force. Another advantage of the divulser, it seems to me, is the obliteration of the fissures which occur at the base of hemorrhoids. We know how effectual stretching of the sphincter is in the cure of fissure in ano; indeed, that is all that is necessary to bring about an entire cure. I have made observations on, I imagine, three-fourths of the cases, and I have found small fissures at the base of the hemorrhoids, which cause the patients to suffer and bring them to operation, rather than the hemorrhoids. It is a question in my mind whether, with the operation without divulsion, you would cure these fissures at the base. Another point is that of hemorrhage. I realize perfectly well that hemorrhage does not often occur in hemorrhoidal operations. Whether because of rapid coagulation of blood in

the dependent veins of this region or not, the fact remains that we do not often see it. However, I recall one fatal case from profuse hemorrhage. The man was very much emaciated at the time of operation, and it did not take a very great loss of blood to completely exsanguinate him. This patient apparently died from internal hemorrhage, and on autopsy his rectum was full of blood; I suppose two quarts of blood were evacuated. In this case the sphincter apparently was not paralyzed, and there was not good drainage to inform us of a loosened ligature. It seems to me in the cases operated upon by the method Dr. Landis offers to us we might have a failure of complete occlusion by the cautery and secondary hemorrhage coming on in a few hours or a few days, which might result fatally, and we would have no evidence of it externally. Even if we insert a piece of gauze into the rectum, with the sphincter active, it is ineffectual as a tell-tale. If the sphincter is paralyzed the drainage is just as effectual as if we have an open wound in the abdominal cavity. In regard to the operation Dr. Ricketts suggests, it seems to me the ligature might slip off the vein. The pile always comes downward, and I always clip almost half-way up beneath the pile with the scissors, thereby getting a better ligation of the loop.

DR. N. I. FRAID: I cannot see any objection to divulsion of the sphincter. We all know, as a rule, hemorrhoids are produced by constipation, perhaps in 50 per cent. of cases. If you dilate the sphincter you remove the main cause which produces the hemorrhoids. The operation performed for external piles is incision, and for internal piles the ligature. The essayist has failed to differentiate between those two operations. I think thumb dilatation or divulsion is the safest, especially in the female. No objection could be found to divulsion of the sphincters, except possibly incontinence of the urine in the first twenty-four hours, and that is a very small item.

DR. W. B. WEAVER: I think Dr. Landis is to be congratulated upon the presentation of such a unique paper. If

what he says will prove true in a great number of cases, it is certainly a boon to humanity. I have seen extreme pain after divulsion, and more pain after divulsion with the divulser. We cannot, when using an instrument, tell how much pressure we are putting on the sphincter as well as we can when using the thumbs. By a proper use of the thumbs we can dilate sufficiently to distinctly paralyze the sphincter. But if we can get along without using dilatation at all, if a great number of cases prove that dilatation is unnecessary, that the patient does not suffer pain and has more comfort all in all, I think that method is to be highly recommended.

Now as to the use of the cautery, ligature and the different methods of operating. I do not know whether that really comes under the head of the discussion of the paper, but since it has been mentioned I may state that we are all familiar with the statistics of the greatest rectal hospital in the world, which go to show that the cautery operation is not followed by the best results, in that there is very frequently a severe contraction, and sometimes a stricture. The accident, hemorrhage, from what I have seen and read, may occur, but in the fewest number of cases.

I want to congratulate the doctor upon his paper.

DR. LANDIS: I desire to call attention to the fact that this paper has only dealt with the clamp and cautery operation, and the recommendations concerning the treatment of the sphincter apply to that operation particularly. I know nothing of Dr. Rickett's method of operating. An infected kangaroo tendon is very liable to be followed by a submucous fistula, a worse condition than the one for which the operation was done. Any operation for hemorrhoids which carries with it the possibility of a secondary operation to do away with the bad effects of the first will hardly be accepted by the majority of surgeons.

In answer to Dr. Freiberg, I will say that my conclusions were drawn from about one dozen cases.

One of the gentlemen has spoken of the efficacy of divulsing the sphincter in

fissure of the anus. Divulsion of the sphincter in itself has nothing to do with the cure of fissures of the anus. When the divulsion is practiced the floor of the fissure is broken and its character changed. A pathological process ceases and a physiological one begins. Any other method, such as the application of a silver nitrate solution or the division of the base of the ulcer with a scalpel, will bring about healing without divulsion being necessary.

Dr. Whitacre has referred to a death from secondary hemorrhage. I would like to ask him if the clamp and cautery were used in that operation.

DR. WHITACRE: Ligation was used.

DR. LANDIS: I have never had any trouble from secondary hemorrhage after the use of the clamp and cautery. Secondary hemorrhage is one of the complications liable to occur after any operation, be it for hemorrhoids or for an abdominal tumor, as Dr. Ricketts has recited this evening. Its possibility should never be lost sight of. External evidences of it might be delayed by a sphincter which had not been paralyzed, but the constitutional symptoms ought to direct the surgeon to the cause of the condition before it becomes dangerous.

In answer to Dr. Fraid, I will state that constipation was a troublesome symptom in all of the cases where divulsion was not employed, and that it promptly disappeared in every case after the operation, so that it is hardly fair to credit divulsion with the cure of constipation in cases where at the same time hemorrhoidal operations have been done. In further answer to Dr. Fraid, I wish to say that the clamp and cautery are contra-indicated in the treatment of external hemorrhoids.

I agree with Dr. Weaver in what he has said about the cone-shaped dilator. It is about four inches long, is introduced into the rectum and pressed upward with considerable force. Just what the point may be doing is unknown. Pelvic organs may be bruised and the foundation for suppurative inflammation laid in the peri rectal tissue. Numerous little lacerations are made in the mucous membrane, and with each

one there is an increased liability of sepsis and danger to the patient.

Contraction and stricture have followed the use of the clamp and cautery. They have also followed the use of the ligature. In both cases they are due to the operator, not to the method employed. Allowance for cicatricial contraction must not be lost sight of, and only enough tissue destroyed in the operation to insure a cure.

As to whether the clamp and cautery or the ligature is followed by a higher mortality seems to depend largely upon the individual presenting the statistics. Personally, of the two operations I prefer the clamp and cautery.

One of the Evils of Incomplete Coitus.

Under the name of a cardiac neurosis of sexual origin, Kisch, of Prague (*Presse Médicale*), describes a set of symptoms that he has observed in certain nervous young women whose husbands made it a practice to withdraw just before the instant of ejaculation, leaving them overexcited and unsatisfied. The physiological tachycardia of coitus, he says, becomes particularly intense in such women, and assumes the form of very distressing palpitation, which at first persists for some time after each incomplete copulation, and after a while occurs during the day, repeatedly and without appreciable cause. For a time this palpitation is the only manifestation of the neurosis, but soon the clinical picture is completed by a feeling of anguish, headache, vertigo, syncope and general weakness. The women are depressed and irritable; they weep on the slightest occasion, and take a gloomy view of life. The appetite is impaired, digestion becomes difficult, and they are constipated. The pulse is small, soft and accelerated, often intermittent and arrhythmical. The arteries, however, are supple, and auscultation of the heart discloses nothing abnormal.

All these symptoms will disappear as by enchantment when the practice on which they depend is given up.—*N. Y. Med. Journal.*

Translations.

PARISIAN MEDICAL CHIT-CHAT.

BY T. C. M.

Sleep and Longevity—Max Nordau—
Genius of Neurotics—Hoffmann—
Edgar Allen Poe—De Quincey—
Gerard de Nerval.

In order to live to be old how much sleep is necessary? Such is a question lately posed at Birmingham by Dr. James Sawyer. His conclusion is strikingly English. "Sufficient sleep," he says. We should like to ask Dr. Sawyer the same question as the *Semana Medica*, of Buenos Ayres: "What does the doctor mean by 'sufficient sleep!'" We know, in fact, that if the majority of men require at least eight hours' sleep, there are many great brain-workers who regard this as an unnecessary waste of time, and yet reach an advanced old age.

Witness Dr. Legge, Professor of Chemistry at Oxford, who lived eighty-two years, always rising each morning at 3 o'clock, after five hours' rest.

Brunel, the great engineer, worked twenty hours out of the twenty-four. Towards midnight he threw himself on a couch and slept for three or four hours; then, fully refreshed, he went to work again.

Alexander Humboldt, according to his "Cosmopolis," took only two hours' sleep in early life; in his old age he allowed himself but four hours, yet he died aged eighty-nine years.

Littre commenced his famous dictionary when forty years old; he was seventy-one when he finished this immortal work. During this period of thirty-two years he regularly worked until 3 o'clock every morning, then slept for five hours. He died at the age of eighty years.

We must not conclude from this that it is only necessary to sleep a little in order to be old, yet it demonstrates that long life and short hours of rest are not incompatible things.

Everything depends on the manner

in which one sleeps. The shorter the sleep in such cases the more profound it is. Here, as in other things, quality serves better than quantity.

From times remote the great capitals of the world have attracted intellectual thinkers. Athens, Rome, Florence, Bologna, have not only been celebrated by the genius of their citizens, but have also sheltered numerous colonies of foreigners,—artists, savants, philosophers,—who find their adopted country an excellent centre of culture. Paris, in the present century, has played the lover for the world of talent. Let us cite Axenfeld, Damaschino, Galezowski, Metchnikoff, Oppert, among physicians and surgeons; Offenbach and Verdi among musicians; and more especially Henri Heine, the great literateur, who wrote as well in French as in German. Many other brilliant but less noted men might be cited, among others, well known, Dr. Max Nordau. Born at Budapest, July 29, 1849, Max Nordau is one of the most famous of all German literateurs, who, following the example of Henri Heine, doubled himself from a philosopher. Let us add, to continue the comparison, that he is critical and a master of sarcasm, and that, widely read in Germany, he is also greatly hated.

Max Nordau is one of the most original figures of the present epoch. Esteemed as a physician, an amiable story teller, with a refined and sympathetic face, calm yet vigorous features ornamented by a long beard, he has all the delicacy of the intellectual Parisian man of letters. No one would dream, from looking at him, that he is the bitter and even brutal author of so many truths and wonderful paradoxes.

The philosopher has written, in German, "The Comedy of Sentiment," where he shows that great men are always fatally controlled by woman. He has written "Le Mal du Siecle," a romance where he places in apposition the practical, active mind of Habert with the idealist Eynhardt. The first succeeds and is a useful man; the second, who holds action in aversion, disappears, leaving nothing behind. He asks: Who makes the greatest progress

for humanity? Who best fulfills the duties of man? Who of the two best interprets the best of life and the world? And yet answers with Pyrrhon: "I cannot decide."

His best known work, "The Conventional Liars of Our Civilization," appeared at Leipzig in 1883, and twelve years afterwards attained its twelfth edition, which equals forty French editions at the least. This publication figured as a public event, and excited violent controversies throughout Europe. He claims that our entire life reposes on hypotheses drawn from former times, which do not respond to our actual ideas. This eternal conflict between social conventionalities and our convictions is a fatal blow. One produces in himself the same effects as a clown who makes all the world laugh but whose own pleasantries disgust and leave most profoundly sad.

Despite of all laws and regulations, we steal and plunder, either directly like a pickpocket, or indirectly in swindling, following the occasion, the individual or the masses. What protection can be found against those who appropriate the millions saved by the economy of the people, or against the stock-broker who lowers and diminishes values by a commercial sleight of hand, destroying many fortunes.

In its actual organization civilization is a machine that works with an enormous force. For a useful effect it needs only subsist on a small part of the force produced at the greatest expense. The average citizen works and struggles so that fortresses, palaces, railroads and canals may be constructed, from which nine-tenths of the people never derive the least benefit, giving rise to new and continual changes of political administration that render the management of the State more and more burdensome—administrations that pay their subordinate employés handsomely, bringing on magnificent and luxurions existences for the few and making life painful for the majority.

In theory the politicians should have ever before their eyes the welfare of the nation; *in fact* they work for self-interest above all. In theory politicians

should be selected from among the best citizens of a nation; in fact it is the violent and ambitious who appropriate the offices and plunder the public. In theory the vote of the elector for the candidate should indicate that he has confidence in him; in fact the elector most often votes for a man with whom he is totally unacquainted, most often a man whom the wily politicians have settled on long before.

Then the plague of journalism. Any Bohemian or stock speculator may found a newspaper if he has money, and gather about him an army of blackmailing scribes, so-called journalists by profession, and shortly become a power in the land, exercising pressure on ministers of States, Parliaments, on art, literature, the stock exchange, and all branches of commerce.

Max Nordau, unfortunately, tells the truth in his "Conventional Liars" of the political world. What shall we say of the noise that Nordau's later book, "Degeneracy," made in the world? If it is true that Lombroso sought his proof of human degeneracy in man, Max Nordau found it in man's works. Max Nordau is audacious, like all men who speak the truth. Max Nordau, although German, does not hate the French, for he tells the plain truth about the Germans, too. German as he is, he is Parisian in the true acceptance of the word, and all Paris is fond of his genius and of the man. Max Nordau is not a "conventional liar."

Arvede Baine has lately published (Paris, 1898) an interesting study of four of the greatest geniuses that ever lived, *i.e.*, Hoffmann, Edgar Allen Poe, De Quincey and Gerard de Nerval.

Hoffmann, the author of so many fantastic stories inspired by hypnotism, stories that recall the powers of contemporary hypnotizers.

Hoffmann excited his genius by frequent libations. He became a drunkard, passing all his nights in grog-shops. But this life injured his genius rather than giving it profit. His mind could not long resist the result of his excesses. He wrote his poorest works at the end of his life.

Edgar Allen Poe, a writer more admired in Continental Europe than any other American author except Fenimore Cooper, was a drinker to whom stimulation seems to have given a particular turn. Poe owed all his hallucinations and weird terrors to alcohol, and his stories all show the effects of the profound impression made on a gigantic intellect by liquor. He knew the moral vertigo that forced him to accomplish an act he did not desire to perform. He describes, in one of his stories, the "demon of perversity," and relates in his "*Chat Noir*" (black cat), the irresistible impulses of the alcoholic. His best works, strange to relate, were preceded or followed by an alcoholic crisis. Alcohol influenced his works, then, yet who would be foolish enough to assert that his genius would not have been even more vigorous without this sad passion for drink.

De Quincey, like Coleridge, was the victim of opiomania, and his passion for narcotics injured rather than promoted his genius. In his "Confessions of an Opium Eater" he gives us a full account of his mania. He admitted this himself, for did he not say?—"My works are composed of fine carved ivory and magnificent enamel, mixed with worms and cinders in funeral shrouds."

Gerard de Nerval, who was such a genius, imagined he had a double, a spirit within him and a spirit that dwelt outside his body. He wrote his best works, notably "*Sylvia*," in the intervals of his attacks. In his latter years he composed the dream on coming back to life; it was reason dictating the memories of lunacy. His manuscripts form a psychological collection of the most curious kind. He finally wrote in cabalistic figures altogether, then hung himself.

But of all these curious things more anon.

Cycling.

CYCLING is injurious to health from three causes: Contraction of the muscular system; chills following perspiration; and the stooping posture, which renders respiratory movements defective.—*Med. Age.*

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DR. J. C. CULBERTSON,

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CINCINNATI, JUNE 4, 1898.

Editorial.**MEANEST OF SINS—INGRATITUDE.**

"Perfidy: The act of violating faith, a promise, vow, or allegiance; faithlessness; treachery; the violation of a trust reposed."

"Such was his *perfidy* to this sacred agreement."—*De Quincy*, WEBSTER.

"Of course I would carry out the spirit of the Clark law if I should be elected to the office of Mayor."—GUSTAV TAFEL, March 22, 1897.

In the local political campaign for municipal officers in the spring of 1897 the medical profession of Cincinnati had a positive assurance from Tafel that in case of his election he would respect and conform to the desires of the reputable members of the medical profession in matters in which physicians are particularly interested. His opponent had given serious offense to physicians of this county while a member of the Legislature. In consequence of these conditions the vote and influence of the medical profession was given with a right hearty good will to Tafel.

A law known as the Clark law had been enacted, which was in the special interest of the men who had served their

country in the war of the rebellion. This was in the way of providing employment in the public service for those who were qualified and in need of it, regardless of age or political affiliation. An inquiry of Tafel as to whether he would carry out the spirit of the Clark law in case of election elicited the above response. His opponent was non-committal. These two factors were the cause of enough men casting their votes for Tafel against their own party affiliations to insure his election.

To the medical profession he has given a pretty drastic dose. This he has done through his appointments upon the Board of City Affairs, which in its wisdom has seen fit to appoint a notorious advertising quack as Health Officer. A more gross and indecent offense was never before flung in the face of common respectability. The party responsible for this cannot stand for two minutes when an opportunity comes for turning it down.

It is well known that the ethics of politicians are not exactly on the same plane with that of the medical profession. The one may never ascend to the other, but in the name of Hippocrates, Æsculapius, Drake, Mussey and other worthies, now saints, the banner of legitimate medicine should not be permitted to trail in the dust of ignorance and quack desecration. There will be a bugle call and a new rally around the flag of honesty, integrity and humanity by the medical profession and its allies, while the dying words, "Boys, keep the colors up!" uttered by Captain Whitcom as he was slain on the field of battle, will yet again ring out clear and unmistakable in every ex-soldier's home at the next and every succeeding election.

The medical profession will never surrender a just principle, and there are eight hundred physicians in Cincinnati

who will not bow their knees or stultify themselves in the presence of ignorance and quackery.

THE WAR.

There has been a second call for troops, and will likely be others. The strength of a possible United States army would need to be more than half a million of men before their abstraction from the industries of the Nation would be felt.

Within the week that is past no great conflict has taken place, but there has been a very material strengthening of the positions held by the United States forces. Several thousand soldiers have been sent to the Phillipines, and other thousands are to go to those and adjacent Spanish islands.

Unforeseen, unexpectedly and unconsidered, those islands have fallen into the lap of the United States. Richer fruits of victory were never gathered. The more there is known of those islands the more apparent are their values. Coal, the life of ocean commerce and fleets, is there in great abundance, while the products of the soil are boundless, undeveloped, and only need the guiding hands of enterprising Americans to make them yield such supplies as to actually create a great commerce themselves.

Two demands will have to be speedily met—public school teachers and educated physicians. Sanitary regulations will have to be enforced, and medical men scattered over the islands for this purpose. The area of the islands is about equal to that of Ohio, Indiana and Kentucky, and the populations is about the same. This enables us to comprehend their great importance.

The United States is suddenly bursting through its chrysalis and developing

with a rapidity rarely if ever equalled in the growth of any nation. This is due to the inherent vigor and vitality of its people. Heretofore complacently regarded by other nations of the earth as a vigorous sprout or offshoot of England, there is shown an ability to go alone that was scarcely suspected; but go it does, and with a self-reliant confidence that is so charming in effect as to bewilder the trained diplomats of European monarchies. From this time on indefinitely the United States will voice a potent power among the peoples of the earth.

Medical science and medical practice in America are at the very forefront, and ready to step out and into new lands where there are new conditions. With the West India Isles in American possession it would be but a short time until yellow fever would cease to be a menace destructive of human life. It would be wiped from the face of those fertile isles as certainly as the running of water down hill. In the Phillipines the bubonic plague would be mastered and bid begone, and it would disappear.

It may be said the aforesaid chicks are not well hatched, which is partly true; but the fact remains that while the shells are still on their backs they are pecking out at a pretty lively rate, and getting abroad into the open with a rapidity that is so startling and comprehensive in expression as to be pretty well understood by all those nations that are looking at the prophetic handwriting on the wall.

THE BOARD OF AFFAIRS.

This is the chief employing board of the city government. In its recent meetings very great consideration has been given to what is known as the Horse-Shoers' Union, and antagonism

of union labor has not been presumed upon. The Board of Education takes every opportunity to express itself in favor of what is known as union labor, and contracts are given out on this basis or withheld. The Mayor was exceedingly touchy on the subject when appointing a superintendent of the City Hall, and bowed in meek, subservient submission to the decrees of outside union labor organizations; but when it came to an appointment of Health Officer, reputable physicians, numbering in Cincinnati eight hundred men and women, no consideration whatever is given them, but instead there is placed over them a blustering, blatant quack, a creature for whom not one of the eight hundred has one particle of respect.

The votes of physicians were given *en masse* for the Mayor, who appointed the Board of Affairs, believing him to represent good government. Never before in history have they been more basely deceived. Their attitude for him in the future can only be that of profound contempt.

Politically, as a voting body of citizens, it is no exaggeration to say, as proven, and that thoroughly, that the medical profession of Cincinnati gives positive direction to more than four thousand votes. There are a few physicians—the number is quite small—who say they are scientific men and have no special interest in political affairs, which is a piece of visionary nonsense of the pharisaic phalactical order, a trifle too good for this world and its affairs, but without sufficient vim and vitality to sprout wings for a soar to the next.

Physicians as a body are intensely interested in good and honest government. They hate that which is boastful, false and pretentious, and hence, hate quackery, with all of its braying ignorance.

It is long since war to the death was declared by intelligent physicians against ignorant pretenders, and gentlemen may cry peace, peace, when there is none; there can be none while life lasts. The Mayor and his Board of Affairs are writing themselves down in history as panderers to ignorance and endorsers of representative fraud.

Let not the Mayor and his Board of Affairs say the writer is sore because he received no official recognition from his and their hands. Never! And on no occasion was he a candidate for their favors beyond this. Representatives of all of the ex-soldier organizations of Hamilton County, without instigation upon his part, requested the use of his name in their own behalf. This was permitted, in order that he might serve them as it was believed by them he could and would. This is all there is or ever has been of that. It is barely possible that if he had waged an active campaign in this relation conditions might now be different, but, on the other hand, the men who have shown themselves ready and willing to heed the siren song of the blatant pretender would likely have pursued the crooked and devious paths they have set out to tread, no matter what he may have said or done.

THE CINCINNATI HOSPITAL.

Where, oh! where, is the 1897 annual report of this institution. There are those who inquire and desire to know, not that it amounts to anything very much, but then the hospital belongs to the public, although there are those who have been identified with it so long that they actually believe they have prior rights through supposed pre-emption processes.

The new element in the Board of Trustees not long ago said he would

suggest to a couple of the old members of the staff that they resign. His suggestions do not seem to have been heeded. From his attitude there seemed to be good reason to believe some long-looked-for changes would be brought about. When they are announced, if ever that time does come, it is hoped there will be enough common courtesy in the Board to make no invidious distinctions in methods adopted.

It is laid away in a nook of the writer's memory that once upon a time one of the most efficient and able men that ever graced the staff, upon entering the ward in which he had been attending, was informed by the nurse that he had been dropped from the staff. Upon inquiry in the office of the hospital the Superintendent informed him that the information conveyed by the nurse was true.

Such methods still pertain. Some are blathered over with fulsome praise and laudation, others are—not.

NOT VERY ANCIENT HISTORY.

Four years ago a very estimable gentleman permitted the new Cincinnati Health Officer to become barnacled to his side when nominated. The henchman pulled so heavily upon the nominee as to compass his defeat at the polls. The medical profession of Cincinnati would not give countenance to any such combine and turned out to a man, and at the polls effectually turned down the aforesaid estimable gentleman.

It is often said that physicians in the management of their business affairs are actual innocents abroad, a sentiment not subscribed to by the writer by any manner of means; but even if just a little bit true, as in their free hospital and clinic service, it is not true when professional points are at stake. These

are seen with naked eyes, and acted upon with the vigor of the latest improved dynamo motors, sometimes a little bit slow, but that is only in appearance, for they never fail to get there and that vigorously.

A COMPARISON.

Comparisons are usually odious and sometimes odorous. This is the case sure enough between the outgoing and incoming Cincinnati Health Officers. Dr. Withrow, the outgoing, is well known both in and out of the medical profession as a courteous, educated and cultured scientific physician, a man who commands respect wherever he is known; as an official, his skill, honor and integrity are beyond question. The incoming person is a quack of the odorous advertising order, specialty nasal catarrh, an ignoramus in medicine and regarded as disreputable in practice by every school of medicine, a man to whom it is revolting to barely think of having the most superficial relations with as an official. Does he believe he has a professional standing? If so, it is the frailest, fragile figment of imagery that was ever imagined.

EDITORIAL NOTES.

Telephone, LANCET-CLINIC office,
May 28, 1:30 P.M.

Til-ling—gil-ling—gil-ling.

"Hello!"

"Hello! Is that Dr. Culbertson?"

"Yes."

"This is Tenney. Don't you want my photo for next week's LANCET-CLINIC?"

"Well, no; not that I know of."

Til-ling—gil-ling—gil-ling.

In some instances a plain pen-picture by the LANCET-CLINIC special artist is

preferable to any shadow or process reflection yet made. So:

Individual, pompous; calls himself doctor; not professionally recognized by physicians of any school of medicine except as a quack by nature and profession; calls himself in his ads. a "catarrh specialist."

Hold your nose and squeeze it tight; he is now Health Officer of Cincinnati, appointed by the Board of Municipal (and other) Affairs. The Board is a board by grace and appointment of the Mayor.

The Superintendent of Parks, re-appointed, stood in with and was one of the gang that tried to sell the Cincinnati Southern Railroad.

The offence of the Board of City Affairs is rank and smells to Heaven. An advertising catarrh specialist is Health Officer. Hold your nose; injunction to be repeated at frequent intervals. * * *

The police patrol wagon service seems to be redoubled in its energies in endeavors to carry patients to the Cincinnati Hospital who should be taken to their own homes or to the nearest physician's office. It would be a thousand times more beneficial to the city, and particularly to physicians, if the entire police patrol service were utterly destroyed than to have it used for any other purpose than as a conveyance of criminals.

"There is a vast deal of demagoguery in politics. At election times that is to be expected. Possibly, under liberal construction, it is permissible. But it shouldn't be allowed to interfere with business. Not even the city's business. Equity, as well as ethics, is involved, and it is as well to be just, even in administration of public affairs."

The above is a part of an editorial from the *Commercial-Tribune* of May 27, 1898, and relates to contracts for horse-shoeing for the city—a difference of twenty-five cents per set being the bone of contention between the Board of City Affairs and the horse-shoers.

Contemplate the actions of the same writer when, as member of this board, appointed by the "Reform" influence, he votes to replace in the Health Office an able and respected physician, Dr. Jno. M. Withrow, by a quack catarrhal specialist, Dr. W. A. R. Tenney ("Wart," as he is familiarly known)! What a travesty upon reform! What a travesty upon justice, decency and everything else that goes to make a respected and respectable community!

How can any one account for such things? Truly, does politics make strange bed-fellows, and only too true is it that *most* always, when we see a fellow carrying upon his exterior the badge "Reformer," we have only to dig a little deeper to find within the worst sort of a demagogue. There has been a *personal* party of late called "Reformers." Watch them soon go to pieces. "To thine own self be true and it follows as the night the day thou can'st not then be false to any one."

One thousand physicians in Cincinnati and vicinity are as one man in voicing condemnation upon the B. C. A. for appointing a man to the position of Health Officer of this great city who is not even recognized by the school from which he was graduated, much less being respected by the medical profession as a whole.

When there are so few political positions that can properly and *justly* be filled by physicians, why, in the name of the mothers who bore them, could not this appointing board see the necessity of a different course?

But what is the inside of the politics in this case—or for that matter, in most cases? Respectability, merit, decency? No; they have nought whatever to do with it. Ask the members how it happened—how it always happens—and this is the reply: The Board being "bipartisan" it is the custom to divide between the two parties the control of the various departments of the city government. Then the three members of each party again agree to divide the spoils, or manage separately some one or more departments. Thus each member is given the appointment of the head of a particular department and the others acquiesce. You tickle me and I will you, is the motto.

The Health Officer appointment was given to Samuel Nieman, Esq.—*the tailor*. (*O mores!* hold to your trousers!), and Dr. Tenney's sons had happened to do some favor for Mr. Nieman—the *tailor*. Here's the um-

bilical cord that bound the Reform infant to its mother, the city.

The Board, as a whole, does not make the selection nor inquire into it as it should, and hence the culpability. They assume a responsibility, not knowing *what* it is, but it is to be hoped that the influence of the medical profession will in the future be such as to demand more respect. Good government is sought by no class more eagerly than by doctors, and the well-being of a community is by far best placed in their hands.

Then, again, the Board will tell you, "We are from necessity dominated, more or less, by certain political influences. We obtained *our* appointment by that means, and have debts to pay—favors to be returned or reciprocated." And thus it goes.

But think of it a moment! The health and well-being of a great city at stake, and not one-tenth the consideration paid it as to the shoeing of a horse. "Equity as well as ethics is involved," said the *Commercial-Tribune*, "and it is well to be just even in the administration of public affairs." *Certainly.*

MEDICAL COLLEGE OF OHIO.—A number of changes and additions to the faculty will take effect at once. Dr. S. C. Ayres has been elected Professor of Ophthalmology and Otology; Dr. Chas. L. Bonifield, Professor of Clinical Gynecology; Prof. Samuel Nickles, having resigned as Professor of Materia Medica after twenty-four years of service, will be made Emeritus Professor; Dr. Rachford will take his place, and Dr. Poole will be made Professor of Physiology; Dr. Wm. H. Crane will be made Lecturer on Medical Chemistry.

ACADEMY OF MEDICINE.—Regular meeting, June 6. The following resolution, offered by Dr. S. P. Kramer, will be made the subject of special discussion:

Resolved, That it is incompatible with the honor and dignity which such membership carries with it for any member of this society to accept employment under the recently appointed Health Officer.

Dr. H. J. Whitacre will read a paper on "The Use of Irrigation and Wet Dressings in Septic Surgery."

Annual dues are now payable.

Selections.

FROM CURRENT MEDICAL LITERATURE.

Note on the Poisonous Action of Creosote and Guaiaccol as Compared with Creosotal and Guaiaccol Carbonate.

At the session of the Society of Charité Physicians of Berlin held on May 20, 1897 (*Berliner klin. Wochenschrift*, 1897, No. 49), Dr. P. Jacob reported on the favorable results that he had gotten from the use of creosotal in the phthisical cases of the First Medical Poliklinik. In the discussion that followed it was stated by one member that creosote itself was of at least an equal value with creosotal, and that one case under his care had stood daily doses of 8 grammes (2 drachms) for many months. It appears that such large doses of creosote have been used recently in a number of cases. Such carelessness in the use of the poisonous creosote induces me to record certain experiments that I have recently made, and which have a bearing upon the subject. The results of these experiments lead me to make the statement that the administration of such large doses of creosote is decidedly risky.

1. On November 10 of this year a dog weighing 6½ kilogrammes (13½ lbs.) was given 10 grammes (2½ drachms) of creosote in gelatine capsules. Five minutes later the animal became stupid and relaxed. Then it fell down, and could not rise again. It became senseless, and twitchings of the limbs, lips and ears appeared. There was no reaction of the lids, the breathing became rattling, and twenty minutes after the administration of the first capsule death occurred without any other special symptoms. The autopsy showed an acute gastro-enteritis (stomach badly cauterized, small intestine violently inflamed), and edema of the lungs in consequence of cardiac paralysis.

2. On the same day the attempt was made to give a dog weighing 9½ kilogrammes (21 lbs.) 16 grammes (4

drachms) of creosotal. It was only found possible to administer 3 grammes ($\frac{3}{4}$ drachm). The general condition of the animal was not disturbed in the least by the dose.

3. On November 11, 16 grammes (4 drachms) of creosotal were administered to the same dog in gelatine capsules. An hour and a half later there was a semi-fluid stool. One and a half pounds of mixed food (meat and rice) was then given to the animal. Three hours after the ingestion of the creosotal he vomited a part of this food. Part of the vomit he ate up again. Beyond a very transitory dullness and languor nothing abnormal could be noticed about the dog.

4. On November 13, a dog weighing 10 kilogrammes (22 pounds), was given 20 grammes (5 drachms) of creosotal in gelatine capsules. There occurred no change in his general condition.

5. On November 13, a dog weighing $4\frac{1}{2}$ kilogrammes ($10\frac{1}{2}$ pounds), received 4 grammes (1 drachm) of liquid guaiacol in gelatine capsules. Immediately thereafter he drank some milk.

Thirty-five minutes after the ingestion of the first capsule there was uncertainty in the movements of the posterior portion of the body, and wobbling gait.

Forty minutes after the ingestion of the first capsule the animal fell repeatedly and got up again.

Forty-five minutes after the ingestion of the first capsule: vomiting of the milk, trembling, more especially of the limbs; deficient pupillary reaction.

One hour after the administration of the first capsule: repeated vomiting of milk; rattling breathing; watery flow from the mouth; cannot stand up.

An hour and a third after the administration of the first capsule: vomiting of milk and mucus; sensibility gone; mucous flow from the mouth.

Two hours after the ingestion of the first capsule: repeated attempts to get up, which are occasionally successful; dizziness and falling.

Two and one-third hours after the ingestion of the first capsule: lies quietly; subnormal temperature; very rapid pulse.

Three and two-third hours after the ingestion of the first capsule: lies motionless; breathing difficult, infrequent (eight to the minute), and stertorous.

In this condition the animal remained for three hours; then the breathing became still less, the animal got cold, and it died half an hour later ($7\frac{1}{4}$ hours after the administration of the first capsule). The post-mortem revealed the presence of an acute gastro-enteritis (violent inflammation of the stomach and the first 40 centimeters ($15\frac{1}{2}$ inches) of the small intestine, with swelling of the mucosa of the rest of the canal), and edema of the lungs in consequence of cardiac paralysis.

6. On November 10, the dog of 10 kilogrammes (22 pounds) weight, used in experiment No. 4, was given 20 grammes (5 drachms) of guaiacol carbonate in $\frac{1}{2}$ kilogramme ($1\frac{1}{10}$ pounds) of raw chopped meat. His general condition was not disturbed thereby in the slightest.

7. On November 13, the dog, weighing $9\frac{1}{2}$ kilogrammes (21 pounds) mentioned under No. 2, was given 25 grammes ($6\frac{1}{4}$ drachms) of guaiacol carbonate in $\frac{1}{2}$ kilogramme ($1\frac{1}{10}$ pounds) of chopped meat. His condition remained normal.

The experiments fully confirm the accepted facts concerning the drugs in question. They prove that both creosote and guaiacol are poisonous and fatal in large doses, and that they are irritant and caustic. They also prove that creosotal and guaiacol carbonate even in large doses do not disturb the general health in the slightest.—DR. W. HESSZ, in *Deut. Med. Wochenschrift*, No. 5, 1898.

Application of the Roentgen Rays in the Case of a Child Who had Swallowed a Pin.

Faivre (*Journ. de Clin. et de Thérap. Infantiles*, Vol. v, No. 32) relates the case of a little boy of two and a half who had swallowed a pointed brass pin. Emetics and purgatives failed to cause its rejection, and when seen after five weeks, the child held the head rigidly flexed toward the left shoulder, any attempt to relieve the torticollis

causing agonizing pain. As no foreign body could be located by palpation or examination by the mouth, the radiograph was resorted to, under chloroform anesthesia. Exposure lasted one hour, the neck being forcibly extended. The pin was located behind the posterior faucial pillar, on a level with the pharyngeal roof. On the following morning the child was anesthetized once more and the pin readily felt and removed.

No erythema resulted from the use of the rays, nor did the heart suffer in any way from the prolonged exposure in the vicinity of the great vessels.—*Archives of Pediatrics.*

Treatment of Gonorrhea.

Gonorrhea is essentially a local disease of the mucous membranes depending upon specific pathogenic infection. When this germ is attacked early by appropriate remedies the disease can be aborted. When allowed to "run its course" as a "self limited disease," we must not be surprised to find septic or alkaloidal systemic poisoning, or any of the many serious pelvic sequelæ. In many cases of chronic gonorrhea that have been treated for months and apparently cured, it was found that Skene's glands, Bartholin's glands, the cervical and utricular glands contained the gonococcus snugly hidden away, ready on the slightest provocation to infect, or reinfect, any mucous membrane.

When we remember the pathological process induced by the gonococcus it is clear that our first object should be to destroy the pathogenic germ. For this purpose any of the following germicides may be used:

Permanganate of potash..	1-10,000 to 1-500
Formalin.....	1-1,000 to 1-500
Chinosol.....	1-10,000 to 1-1,000
Bichloride of mercury....	1-10,000 to 1-500
Peroxide of hydrogen.....	1-4 or 1-2
Argentamin.....	1-10,000 to 1-500
Thymol.....	1-1,000 to 1-100
Oxycyanatum.....	1-1,000 to 1-500
Nitrate of silver.....	1-100 to 1-10
Carbolic acid.....	1-100 to 1-20
Lysol.....	1-100 to 1-20
Argonin.....	1-50 to 1-10
Creolin.....	1-100 to 1-50
Resorcin.....	1-100 to 1-50
Creosote.....	1-100 to 1-50
Zinc chloride.....	1-50 to 1-10

Saturated solution of salicylic acid in alcohol..	1-10
Acetate of lead.....	1-100 to 1-50
Sulphate of zinc.....	1-100 to 1-10
Iodoform—powder or ointment.	
Chloral.....	1-50 to 1-10
Ichthyol.....	1-50 to 1-10
Actol.....	1-1,000 to 1-100
Itrol.....	1-1,000 to 1-100
Cresol.....	1-1,000 to 1-100
Chlorine water.....	1-100 to 1-50
Turpentine.....	1-100 to 1-20
Labarraque's solution....	1-50 to 1-10
Iodine.....	1-100 to 1-50
Alum.....	1-50 to 1-10
Boric acid.....	1-50 to 1-10

—*Pacific Med. Journal.*

Gonorrhea of the Rectum.

According to Baer (*American Journal of Surgery and Gynecology*) gonorrhea may and often does invade the rectum in women, from (1) abnormal sexual intercourse; (2) indirectly from the communication with the rectum of an organ attacked with gonorrhea. By the conveyance of the germs from without by pus, or by therapeutic measures (thermometry, irrigation, etc.). When developed, some patients who have ulceration complain of marked pain on defecation; others discharge both pus and blood via ano. There is usually a slight discharge, which always contains typical gonococci. The treatment consists in injection of a 3 per cent. solution of boric acid, and to diminish the secretion and destroy the gonococci a solution of nitrate of silver 1-2000, employing a quart of each solution. The treatment should be continued until no germs can be detected in the discharge, usually for from five to six weeks.

THE Charles Roome Parmele Co., of New York, has recently issued an interesting pamphlet descriptive of the clinical experience of reputable men in the profession who have used Arsenauro and Mercauro. That these products possess merit is evident by the results obtained by those who have used them. These clinical reports have all appeared in medical journals, and are here compiled for the benefit of physicians interested in the products of this reliable house. Any physician may obtain a copy by writing to the firm.

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Whole Volume LXXIX.

Original Articles.

THE HYGIENE OF OPHTHALMIA NEONATORUM.¹

BY FRANCIS DOWLING, M.D.,

CINCINNATI,

MEMBER OF THE SOCIETY OF HYGIENE OF FRANCE;
MEMBER OF THE AMERICAN MEDICAL
ASSOCIATION, ETC.

This disease, as you are all aware, is a purulent inflammation of the eyes of the new-born child. It is one of the most serious diseases met with in the human eye, and leads to more cases of blindness than any other one disease. Magnus, of Germany, in an analysis of 2,528 cases of blindness from all causes, found that 11 per cent. were from this disease alone. Horner, in his "Hand-buch der Kinder Krankheiten," states that of 108 cases of children affected with this disease, 39 per cent. had injured eyes. Hirschberg, out of 200 cases, saw 27 per cent. of injured sight. Schöler, in 156 cases, saw 27.5 per cent of injured sight. Emrys Jones, of Manchester, out of 420 cases, had 17 per cent. of injured sight. Haussmann, in a monograph on "Die Bindehaut Infection der Neugeborenen," published in Stuttgart in 1882, gives the following interesting statistics: In regard to the amount of blindness resulting from this disease in several blind asylums, Copenhagen had 8 per cent., Berlin 20 per cent., Vienna 30 per cent., Paris 45 per cent.

During the year 1876, of all the blind admitted to the asylums of Germany and Austria combined, 33 per cent. were from this disease, and Horner says that in other countries the percent-

age ranges from 20 to 79 per cent. In the blind asylums of Philadelphia, during the year 1871, there were 20 per cent. from this cause.

ETIOLOGY.

In regard to the etiology of this affection, the weight of evidence seems to show that it is caused in the majority of cases by infection from the vaginal secretions of the mother, either during or immediately after the birth of the child; furthermore, that a species of micro-organism, the gonococcus, is usually present in the discharges of all women whose babies have purulent ophthalmia, and that this is the active agent in the infection. Neisser, of Breslau, was the first to demonstrate the presence of these micro-organisms in blennorrhic discharges, and their presence was considered as proof of the specific nature of such discharges. This was denied by many gynecologists and ophthalmologists, who pointed out the fact that a large number of cases of ophthalmia neonatorum showed no evidence of the presence of these organisms. Zweifel, in support of Neisser's discovery, states that he found that lochial secretions in which no gonococci were found could be introduced into the eyes of newly-born children without fear of causing blennorrhoea. Kroner examined the secretions of ninety-two cases of ophthalmia neonatorum, and detected the gonococcus in sixty-three of these cases, while in twenty-nine cases they were absent.

Whatever may be the theories advanced in regard to the character of discharge necessary to produce this disease, reliable experiments have shown that secretions which contain these little micro-organisms, called gonococci, are

¹ A lecture delivered in the Good Samaritan Hospital, Cincinnati, before the Nurses' Training School, May 11, 1898.

extremely virulent, and when brought in contact with the mucous membrane of a sound eye, even in very small quantities, will, with absolute certainty, inside of from four to five days, set up a purulent ophthalmia. Therefore, let me advise you to be extremely careful in handling cases of purulent ophthalmia that you do not transfer particles of the discharge to your own eyes, or to the eyes of others with whom you may as nurses be brought in contact, through an uncleanly condition of your hands, unclean napkins, bandages, etc. It has also been demonstrated that a culture of these organisms is capable of producing ophthalmia neonatorum by inoculation.

In regard to the various opinions concerning the etiology of this disease, Juler thinks that the affection is caused by the introduction of purulent matter from some part of the genito-urinary tract of the mother into the conjunctival sac of the infant shortly after parturition. Meyer, of Paris, thinks that the etiological element in this disease is direct infection through a leucorrhea of the vagina or cervix-uteri, finding its way into the infant's eyes during the act of birth, or later by means of soiled linen or sponges. Berry, in his work on eye diseases, states that the disease is due to an inoculation with a specific virus, either directly from the maternal passages during birth, or afterwards by the use of soiled linen, sponges, etc., in washing the child. If the inflammation begins from twenty-four hours to four days after birth, the disease comes from the mother's sexual organ during birth. If, on the other hand, it makes its appearance after the fifth day, and not simultaneously in both eyes, it is due to some extraneous source of infection.

Galezowski, of Paris, thinks that in the great majority of cases the disease is caused by a blennorrhea or a leucorrhea in the mother, or by the lochia, which becomes purulent and contagious, especially during epidemics of child-bed fever. In this connection Trousseau called attention to the unusual amount of ophthalmia neonatorum during the epidemic of puerperal fever in 1852, and Lorain witnessed the same fact in the Hospital St. Antoine, of Paris.

It is quite likely that, as the child's eyes are closed during its passage through the mother's genital organs, infection of the eyes does not take place until soon after birth, when the child first opens its eyes; this is vouched for by some of the ablest authorities. Arlt states that if the disease does not appear until the eighth day after birth it is due to infection from a sponge or to a vaginal secretion from some one else other than the mother of the child. Infection may take place, on the other hand, during the passage of the head through the vagina in cases of protracted labor, or where instrumental delivery, turning, etc., are necessary. In these cases it is probable that the eyes of the child are forced open through displacement of the soft parts by the instrument or the hand of the accoucheur, and it has been suggested that this is the reason why ophthalmia neonatorum is more frequent among male than among female children, because the larger heads of the former pass more slowly through the vagina. Haussmann, in his "*Monograph die Bindehaut infectione der Neugeborenen*," cites cases in strength of this latter statement, where blennorrhea broke out immediately after birth or was present during birth, and one case where there was perforation of both corneæ when the child was born, as a consequence of blennorrheal infection.

It is admitted by some authors that this disease is not caused by a virulent vaginal discharge alone, but may be due to a simple leucorrheal discharge which has become at all purulent in character, and other authors claim that a simple vaginal catarrh will even give rise to this affection. I do not coincide with this latter assertion, for the reason that, as the majority of women have a leucorrheal discharge during the latter months of pregnancy, if this were sufficient for infection there would be a much larger percentage of women who would infect their children with this disease.

When infection takes place during labor the disease shows itself in the child from the second to the fifth day. When the disease shows itself later than

the fifth day the infection probably takes place after birth.

Another source of infection, in my opinion, is the dirty water in which the new-born child is washed. It is very often the custom to wash the child's body and eyes in the same water, using the same sponge for both. This is bad practice. The body should be washed first, and the dirty water, together with the sponge, should be thrown away. Fresh water and a clean rag should invariably be used to cleanse the eyes and face of the child. In this connection Dr. Delens, of the Hospital Lariboisiere, thinks that sponges and dirty rags are the usual means of infection.

This disease is frequently conveyed, owing to carelessness of the nurse, to the eyes of children, irrespective of the presence of any discharge on the part of the mother; this happens particularly in foundling and lying-in hospitals. In the great Vienna Foundling Hospital, from the year 1854 to 1866, 130,104 children were admitted; of these 5,616 were affected with blennorrhoea; one-fourth of these, or 25 per cent., contracted the disease after their admission to the foundling hospital through uncleanness on the part of the nurses.

Some authors attribute the causation of blennorrhoea neonatorum to intense light, currents of air, cold, etc., and a recent French authority claims that exposure of the infant to cold, and more especially to humidity, is sufficient to produce a conjunctivitis, which, in the case of a new-born child, readily passes over to the purulent form; and Dequevauvillier states that it is a matter of frequent observation in foundling hospitals that the disease attacks by preference those children whose cradles are placed near the doors or windows.

After birth, ophthalmia neonatorum may be caused by a part of the lochial secretions of the mother getting into the eyes of the child, through the dirty bed linen or the dirty fingers of the mother; particularly when the former is not over-clean and when the child has no crib, but lies in its mother's bed, cases are on record of this kind. Therefore the greatest cleanliness is necessary

on the part of the attendants and of the lying-in woman herself.

Of all the cases in the foundling hospitals of Prague and Vienna and St. Petersburg about one-fourth of all the children contracted the disease by infection from other children who had the malady. In private practice cases of this disease occur more frequently among the children of the poorer classes than among those of the wealthier classes, for the reason that cleanliness receives less attention among the former.

Overcrowding is another frequent cause of the spread of this disease in foundling hospitals, and when this occurs and is unavoidable the greatest attention to the cleanliness and to the ventilation of the rooms should be observed, and a competent physician should inspect the eyes of the children every day, and those who are diseased should be separated from and occupy different apartments from those who are healthy. This isolation plan is carried out in some of the Paris hospitals and with the best of results.

TREATMENT.

This disease, if seen in time, is usually amenable to proper treatment, and generally a good result can be expected. The trouble usually is that a large number of these cases are treated at first by midwives, or incompetent persons, and it is only when the disease has assumed a grave form that the services of an eye surgeon are called in, and then even with the most skillful treatment a large number of these cases turn out badly in partial or complete loss of sight. On this point Juler, of England, states that more blindness is caused by this disease than by any other single affection of the eyes, and he thinks it is due largely to the fact that the treatment is frequently left to persons who are ignorant or incompetent.

My friend Dr. Randall, of Philadelphia, in a paper read at the twenty-ninth annual meeting of the American Ophthalmological Society, held at Hartford in 1893, asks the question, "Can loss of the eyes by ophthalmia neona-

torum always be prevented?" and as a text he cites the case of a child which he treated, in which the disease made its appearance on the fourth day after birth. He treated the case from its inception, and watched it day and night; nevertheless, in the second week of the disease the child lost the sight of both eyes from destruction of the corneæ.

Notwithstanding the bad results obtained by Dr. Randall in this exceptional case, I think, as a general thing, when we get to treat the case from the onset of the disease, and where the child is fairly well nourished, and free from scrofula or other taints, we can give assurances of a fairly good termination of the disease. The cases in which a bad outcome is to be feared are those where a child is born prematurely, where it is of a weakly constitution, does not nurse well and has to be fed with a bottle. When the disease affects such children the danger of losing the sight from affections of the corneæ is very great, and this very often occurs notwithstanding the most skillful treatment. With one or more of these conditions present the child often goes to bed at night with sound corneæ, and wakes up in the morning with a perforation of one or both of them and the sight destroyed.

When I am asked to treat a case of this disease I adopt the following plan: I first require the relatives to engage the services of a nurse who can devote her entire time and attention to the child, in the way of keeping the eyes clean, etc. I first see that the nurse herself is cleanly, especially in regard to her hands and finger nails; then I instruct her how to hold the child's head in her lap and how to cleanse its eyes properly. I leave orders to have this cleansing done every hour during the day in case the matter is profuse and purulent, as it usually is after the first week from its inception. The cleansing is done with a piece of absorbent cotton dipped in a ten-grain solution of boracic acid. During the night the eyes are cleansed every two hours, which I think is often enough, so as to enable the little patient to get a fair share of sleep to strengthen it for the day's

ordeal. I usually order a soft towel or a piece of old linen to be placed under the child's head when it is in bed, in order to protect the bed clothes from discharges; this should be changed as often as it is very much soiled.

During the first week of the disease, after a thorough cleansing from the discharge, I usually touch the mucous membrane of the everted lids with a saturated solution of boracic acid twice a day, but after the discharge has become profuse and purulent I use a ten-grain solution of nitrate of silver, pencilled over the entire surface of the everted lids; this I allow to stand a few minutes, after which I wash off the superfluous silver with warm water. This treatment I practice twice a day while the discharge is at its height. If the cornea becomes affected I instill into the eye a solution of atropia, two grains to the ounce of water. When the discharge begins to diminish materially I only make the caustic applications once a day. I think stronger solutions of nitrate of silver than I have mentioned are not indicated, and in the early stages are decidedly harmful, as they tend to aggravate the inflammation and thereby increase the infiltration of the sub-conjunctival tissues, and thus strangle the blood-vessels which supply the cornea with nourishment. Besides this, these strong solutions often tend to produce convulsive attacks in a child, a condition which is not at all to be desired, as it greatly alarms the parents. Even with the ten-grain solution, a child that I was treating some time ago had a short convulsive attack. Drs. Peter and Galezowski, of Paris, both witnessed this effect from the use of strong solutions of nitrate of silver, and they attribute it to spasm of the glottis caused by the cries of the child. The treatment ought to be kept up from four to eight weeks, even in favorable cases.

PROPHYLAXIS.

In order to carry out a true prophylaxis, we must endeavor to prevent infection both during the delivery of the child and after its birth. For this purpose two methods have been advocated

—the disinfection of the maternal passages and the disinfection of the eyes of the new-born infant. As regards the mother, it is desirable to have her treated during pregnancy for the cure of any catarrh of the vagina that may be present, particularly if the discharges show any evidence of a purulent character. If this has not been done, however, the disinfection of the vagina ought to be made during delivery with a 3 per cent. solution of carbolic acid or with a 4 per cent. solution of boracic acid, more especially if the labor is slow, as is usually the case with the birth of the first child. In Austria the midwives are required by law to disinfect the vagina before delivery. At present most all authors agree that the most important thing to do is to disinfect the eyes of the infant immediately after its birth. The infecting secretion, as a rule, gains access to the eyes after birth; it hangs about the border of the eyelids and eyelashes, and first gets into the conjunctival sack when the child opens its eyes, for it must be remembered that they are usually closed while in the maternal passages.

The different methods proposed for the disinfection of the eyes of new-born infants are as follows: First, washing out the eyes with pure water; second, cleansing the eyes with some disinfecting fluid, and most of the disinfectants used in surgery have been recommended for this purpose by different authors.

Crede, of Germany, first used a solution of borax, but was not quite satisfied with its results. Bischoff recommends a solution of salicylic acid, while Schmidt-Rimpler, of Germany, a modern medical writer on eye diseases, gives the preference to chlorine water. A great many authors recommend a solution of carbolic acid of the strength of 2 per cent., and this has the advantage of being present in most hospitals, and being easy of access to nurses. But of all the disinfectants that have been proposed, statistics seem to show that a 2 per cent. solution of nitrate of silver dropped into the eyes does the most good in preventing infection. I would give it the preference

over all others. Before using, a bath should be first given the child to cleanse it thoroughly; then its eyes should first be washed out with fresh lukewarm water, using a soft clean rag for this purpose, or the water may be squeezed into the partly open eyes from a piece of absorbent cotton which has been soaked in the water. After the eyes are thoroughly freed from any secretion, one drop of the nitrate of silver solution should be dropped into each eye with a glass dropper. It is not generally necessary to repeat this; the treatment often causes some redness of the eyes and some slight discharge of mucus, but this all disappears spontaneously about the third day at most. The mode of action of the nitrate of silver in these cases is as an antiseptic. The silver acts more thoroughly than the carbolic acid solution, for the reason that it not only acts on the surface of the mucous membrane, but also penetrates more deeply into the tissues, and thus is enabled to destroy the micro-organisms that may have penetrated into the tissues beneath the surface, as they often do in infections of this nature. The surest antiseptic of all is unquestionably a solution of corrosive sublimate, but this can only be safely used by a physician, for the reason that if too strong a solution be used it is apt to cause great irritation of the mucous membrane of the eyes, and cause great swelling of the lids and injury to the cornea. One of the great troubles in making applications to the eyes in these cases is to evert the lids, and you, as nurses, ought to have a certain amount of practice in this procedure. If it is done roughly the eyes are apt to be injured by the manipulations, but with a little care and practice this may be avoided.

The effect of measures like these has been to reduce the frequency of this disease among infants in the lying-in hospitals at Halle from 12 per cent. to 3 per cent., and in the lying-in hospital at Leipsic the cases fell from $7\frac{1}{2}$ per cent. to $\frac{1}{4}$ per cent.

Within the last month, Dr. Darier, of Paris, has reported some investigations made by him with a new antiseptic

tic preparation called protargol. He claims that the solution of this preparation is in every way superior to any other preparation that has so far been used, including the classical nitrate of silver, both as prophylactic and in the treatment of ophthalmia neonatorum. The following points of advantage are claimed for it over even the nitrate of silver: it has no corrosive effects upon the tissues, and its employment is consequently not injurious even in very strong solutions; it penetrates deeper into the layers of the epithelial cells, producing its germicidal effects more completely than the silver preparation; it does not attack the cornea even in the strength of a 50 per cent. solution, and produces very little, if any, redness of the mucous membrane of the eye. The preparation is a powder, and is soluble in distilled water in all proportions. A 5 per cent. solution is the one generally used as an eye lotion in ordinary cases. It is to be dropped into the eyes three or four times a day. For cauterization, the physician makes use of a 20 to 50 per cent. solution once or twice a day, applied by a camel's hair pencil. Between these applications by the oculist the nurse instills into the eyes a 5 per cent. solution three or four times a day. A 10 per cent. solution should be applied to the eyes of the new-born child, after washing it, as a prophylactic measure.

Dr. Neisser, of Breslau, corroborates the statements of Dr. Darier in regard to the superior antiseptic qualities of this preparation, stating that it destroys micro-organisms such as the gonococcus and staphylococcus quicker than the nitrate of silver, argonine, or any of the other disinfectants in use.

216 W. Ninth Street.

OVER 1,200 physicians have offered their services to Surgeon-General Sternberg to serve in the war. No medical appointments are made in the regular army of any person over twenty-nine years of age. All must be graduates of medicine, and must pass an examination as to competence before the army medical examining board.

FIFTY CASES OF ABDOMINAL SECTION WITHOUT A DEATH.¹

BY J. M. WITHROW, M.D.,

CINCINNATI,

GYNECOLOGIST TO CHRIST HOSPITAL AND TO THE PRESBYTERIAN HOSPITAL.

One year ago I reported to the Academy of Medicine a series of thirty-five abdominal sections without a death. This report to-night includes all of the cases in which I have made laparotomy since that time. They are fifteen in number, making the entire series to consist of fifty cases done consecutively without a death.

Case 36.—Mrs. S. R., aged thirty-eight, white, was admitted to Christ Hospital after a long illness. Upon examination, the ovaries, uterus and tubes were found bound down and immovable. She was kept in the hospital for some time under the usual expectant treatment, with the hope that the situation might clear up. Fever remained constant, however, and abdominal section was done, when she was found to have a double pyosalpinx. Both ovaries and tubes were removed. The Douglas pouch was so badly damaged that drainage through the vagina was made with the accordion-plait drain. Recovery was uneventful, and the patient was discharged in thirty days.

Case 37.—Mrs. M. D., colored, presented upon examination a large, fluctuant tumor in the lower abdominal region. It was diagnosed an ovarian cyst. When the patient was put upon a table for operation the tumor had disappeared. Upon section, however, it was found that the cyst, which had been filled with broken-down blood, had ruptured, probably during the anesthesia. The abdominal cavity was sponged out as carefully as possible and then washed with a normal salt solution. The accordion-plait drain was used in order to furnish drainage for any possible peritonitis that might arise from the questionable character of the ruptured

¹ Read before the Academy of Medicine of Cincinnati, April 25, 1898.

cyst contents. The patient made a complete recovery.

Case 38.—Mrs. E. C., aged forty, colored, came to Christ Hospital with a large ventral hernia about the size of a fetal head. It was laid open and the redundant sac wall and the peritoneum excised and its margins brought together with three rows of suture. The patient left the hospital in three weeks, and has remained well.

Case 39.—Mrs. S., aged thirty-five, white, came to Christ Hospital after a long illness with a pelvic peritonitis. An examination disclosed ovaries, uterus and tubes immovably held in an inflammatory exudate. She was kept under observation for two months, and under the usual treatment, but did not greatly improve. Abdominal section was made and both tubes were found filled with pus and matted with the ovaries behind the uterus. The ovaries and tubes, with other adhesions, were removed, and the Douglas pouch drained with the accordion-plait drain through the vagina. The patient made an uninterrupted recovery.

Case 40.—Mrs. D., aged forty-three, white, presented herself at Christ Hospital with an enormous abdominal enlargement, which, upon examination, was found to be largely due to free fluid in the abdominal cavity, although there was a distinct mass in addition to the fluid. The enlargement had come very rapidly. A diagnosis of malignant disease was made. Abdominal section was done and the mesentery and omentum were found very generally carcinomatous. The carcinoma was probably primary in the right ovary. Of course, no attempt was made to remove the disease. The patient left the hospital in three weeks.

Case 41.—Mrs. M., aged forty-one, was sent to Christ Hospital by Dr. —, of Point Pleasant, W. Va. The patient had an exostosis from the pelvis upon the right side, extending an inch and a half into the broad ligament, which, upon examination, was thought to be an osteosarcoma. In addition to this, both ovaries and tubes were bound into and held by an inflammatory mass behind the uterus. Abdominal section was

made and the ovaries and tubes, which were densely adherent in Douglas' pouch, were dug out and removed. There was no pus. The exostosis was not interfered with, and the patient made a complete recovery, leaving the hospital in twenty-six days, and has since remained well. The intense pain of which she had been suffering has entirely disappeared, and I am inclined now to believe that the exostosis bore no relation to the other conditions, and that it was not malignant, as it is now six months since the operation and the patient is still in good health.

Case 42.—Mrs. C. K. M., referred by Dr. McCready, of Monroe, O. The patient had suffered several attacks of appendicitis. Upon physical examination the ovaries and tubes were found implicated in a general inflammatory mass. Upon abdominal section the appendix and the ovaries and tubes, which were purulent, were all removed. The appendix was very much thickened but contained no pus. In this case there was infection of the abdominal wall, which made the patient's stay in the hospital thirty-five days.

Case 43.—Mrs. M. S., referred by Dr. W. E. Shaw, had been sick for four months with a pelvic peritonitis. Fever had been practically continuous since the beginning of her illness. Upon examination it was absolutely impossible to palpate separately the ovaries or tubes, as the whole pelvis was a mass of ovaries, tubes and exudation. Abdominal section was made and the operation was the most difficult that I have ever done or have ever seen. The adhesions were so old and so intimately held the pelvic organs to the bony walls and to the intestines that it was almost impossible to remove them. In this case a coil of small intestine was found adherent in Douglas' pouch, between the ovaries and tubes, on a level with the internal os. This coil was so firmly bound down that in the effort to liberate it from its adhesions, in order to get at the ovary and tubes, two large holes were made, which were closed at once. The accordion-plait drain was used and the patient was gotten off the table more dead than alive. She made, how-

ever, a slow and tedious recovery, but did not leave the hospital for sixty-days. During her stay in the hospital a septic process was set up in the left side just above the crest of the ilium, which had to be evacuated. Since she left the hospital, in February, although septic conditions in connection with the abdominal section have disappeared, there is now a consolidation of the lower left lung, and she is far from well.

Case 44.—Mrs. G., aged thirty-five, white, referred by Dr. King, of Lockland. Upon examination, a large abdominal growth was found, which was diagnosed an ovarian tumor. The patient had been having fever rather constantly, and upon abdominal section an ovarian cyst was removed and the tube upon the the opposite side was found deeply buried in Douglas' pouch, below the tumor, which was upon the right side. The purulent tube and its ovary were dug up and removed, and the accordion-plait drain used. The patient made an uninterrupted recovery, and left the hospital in thirty days.

Case 45.—Mrs. M., aged twenty-eight, white, admitted to Christ Hospital with a history of a dragging pain in the back and pelvis for the previous two years. Upon examination both ovaries were found prolapsed and immovable behind the retroverted uterus. They were both removed. The patient's recovery was uneventful, and she was able to leave the hospital in twenty-one days.

Case 46.—Miss L., aged twenty-five, referred by Dr. Scott, of Harrison, O., had been sick with pelvic inflammation for six weeks. She was admitted to Christ Hospital, where the ovaries and tubes were bound down behind the uterus and immobile. She had had constant fever for six weeks, and it was reaching 102° every afternoon at the time of her admission. She was treated expectantly in the usual way for two months. She was gradually losing strength, and it was decided to operate as a last resort. At the time of the operation a tumor could be felt in the left iliac region above Poupart's ligament. Abdominal section was made. The mass found upon the left side was

found to consist of a very dense adhesion between the bladder and rectum, entirely roofing over the tubes and ovaries. It was with the greatest difficulty that the rectum was separated from the bladder. After the rectum was free the pus-sac, consisting of the ovary and tube, which was unrecognizable, was gradually peeled up and out of Douglas' fossa. The opposite ovary and tube were also bound down, and were stripped up with the greatest difficulty. The adhesions were old and so dense as to make it well nigh impossible to find the line of demarkation between the structures. Finally, however, the pyogenic walls of the torn sacs were stripped off and removed and the accordion-plait drain introduced from the vagina, and the whole pelvis filled with the continuous gauze packing. The operation required an hour and fifteen minutes, and the patient was in bad condition when removed from the table. She has made a tedious recovery up to date, and, although it is two months since the operation, there is still a purulent discharge from Douglas' pouch, which is kept open by a rubber drain. The patient is able to go about, and will ultimately, in all probability, be entirely well.

Case 47.—Mrs. H., aged forty-four, white, referred by Dr. Sedam for prolapsus uteri. She attended regularly at the Laura Memorial College clinics, and for one year I kept an inflated ring in position, which completely controlled the prolapsus. During this time, however, a fluctuant tumor was found to develop on the left side of the uterus, which was diagnosed either a hydrosalpinx or an ovarian cyst. She was sent to the Presbyterian Hospital the latter part of February, and upon abdominal section a dermoid cyst, whose contents were shown at the Academy, was removed. At the same time ventrofixation of the uterus was done. The patient has since returned to her usual avocation as a domestic. The uterus remains attached to the abdominal wall.

Case 48.—Mrs. P. M., a very stout woman, aged thirty-seven, and the mother of several children, had a ventral hernia of two years' standing about the size of a fetal head. The sac was laid

open by section and its walls extirpated. The margins of the ring were then brought together with three rows of sutures. She left the hospital in thirty days cured.

Case 49.—Mrs. M., aged twenty-five, colored, consulted me with the statement that a fibroid tumor had been diagnosed. I found a hard mass to the right of, and apparently connected with, the uterus, and believed it to be a fibroid tumor. Upon the left side was a similar mass, though slightly fluctuant, which I believed to be a fibro-cyst of the uterus. Abdominal section was done, when a very unusual condition was discovered. She had no fibroid tumor, but there were malignant disease of the mesentery and small loose cysts, perfectly movable and not tense, yet containing a clear fluid. These were found everywhere between adherent coils of intestine, and a collection of them, not unlike a bunch of grapes, occupied the place of the ovary on the left side. These were evacuated by puncture, when they collapsed as a vesicle would. Upon the right side she was found to have an intra-ligamentous cyst, tensely bound down deep in the ligament. I am inclined to think that the condition known as Rokitsansky's tumor existed in addition to the malignancy of the mesentery. No attempt was made to remove the malignant mass. The patient made a good recovery from the abdominal section.

Case 50.—Miss G. E., aged twenty-three, referred by Dr. Robinson, of this city. The patient had been sick with pelvic inflammation for six weeks. Upon examination a double pyosalpinx was diagnosed. The patient was sent to the Presbyterian Hospital. An abdominal section was made, when the diagnosis was confirmed and both ovaries and tubes removed. The patient has made an ideal recovery.

The first eleven operations in this report were done at Christ Hospital; the last four in the Presbyterian Hospital. It will be noted that seven of these were cases of pyosalpinx, and so far as this condition goes, the experience of this series of cases justifies the conclusion

that the patient's chances for complete recovery are far better if the operation be performed as soon as the disease is clearly diagnosticated. There is no question but that a tube which is filled with pus and occluded, as it must be, in its calibre in at least two places, is practically useless. There might occasionally be instances where a plain pus-tube not associated with a diseased ovary could be relieved of its purulent contents and drained, and the occluded ends dilated so that it would establish a permeable avenue between the ovary and the uterus. Such cases, however, are so rare as to be curiosities. Whenever they are discovered the indication for draining and saving the tube and ovary is perfectly clear and should be followed. If, however, as in all of the cases here reported, the ovary has been deeply imbedded in Douglas' pouch, diseased and densely adherent to the walls of this cavity, and the tube at the same time a pus-sac, there is little to be hoped for in the practice of conservative surgery and in the endeavor to preserve the ovary and tube in proper physiological relation with the uterus. In only one instance in this series of cases was there an ovary removed whose condition would justify its being left, and even in that case it was so intensely adherent and was so much damaged in the process of its liberation that it was deemed wise to remove the organ.

The past year's experience with the accordion-plait drain, which I described in detail in my report one year ago, has justified the opinion then expressed that it was a far safer method for general use in cases where there is a badly damaged Douglas' fossa than the Mikulicz drain.

There has been no great variation in the conduct of these cases, with the exception, perhaps, of the beneficial influence of hypodermo-cleisis. In two of these cases a half pint of normal salt solution was used in this way shortly after the termination of the anesthesia. Ether has been the anesthetic generally employed, and I believe that we have somewhat mitigated the severity of the vomiting following its use by allowing the patient to inhale the fumes of vinegar from an ether cone.

The entire series of cases, including those reported to the Academy of Medicine on March 22, 1897, and published in the LANCET-CLINIC for April 24, 1898, is classified as follows:

Hysterectomy:	
Cancer	4
Fibroid	1
Adherent to suppurating cyst	1
Ovarian cysts:	
Multilocular	9
Dermoid	1
Ruptured	1
Pyosalpinx	8
Cyst of broad ligament	3
Ovaries not diseased:	
Hystero-epilepsy	2
Uncontrolled hemorrhage	1
Soft papillomata of ovary	1
Prolapsed adherent ovaries	5
Exploratory	5
Ectopic gestation	1
Appendicitis	1
Ventro-fixation	2
Ventral hernia	2
Cysto-sarcoma of ovary	2
Total	50

[FOR DISCUSSION SEE P. 610.]

Acute Otitis Media.

I have seen the following simple device, always convenient, give grateful relief: A piece of cotton is placed lightly in the mouth of the canal. A pipe is filled with tobacco and lighted. Then a piece of clean cloth is placed over the mouth of the pipe bowl and gently blown through, while the lip piece of the warm stem rests against the cotton pledget. This filters the warm smoke through the cotton into the canal, and a grateful sedative effect is soon obtained. I do not remember having seen this remedy mentioned in the books, but I have witnessed its efficacy in the absence of other remedies. The practice indulged in by the laity of pouring oils, etc., into the ear is a vicious one, since these become rancid, irritate, and predispose to a subsequent inflammation. Poulting is also bad, for it favors supuration and perforation of the drum-head.—DR. SETH SCOTT BISHOP.

IN the treatment of acute cystitis five drops of the tincture of thuja every three hours is a valuable remedy.—*Med. Summary.*

TYPHOID PERFORATION.

BY B. MERRILL RICKETTS, PH. B., M. D.,
CINCINNATI.

It is perhaps wise to conclude that the abdomen should be opened in all cases of perforation of the gut in typhoid fever. This statement seems especially rational when it is known that sixteen recoveries have resulted from eighty-three operations, all of which have been made since April, 1884.

The opening of the belly should immediately follow perforation, as those cases which have recovered would indicate. The most favorable ones are those in hospitals where the condition is more likely to receive early detection and operative interference, while those cases in the rural districts are not so often seen by the physician or so likely to be attended by an experienced nurse.

It is said that 37½ per cent. of the deaths from typhoid fever in Johns Hopkins Hospital are due to perforation, and, as it is pretty generally believed that all undergo dissolution if undisturbed, it is the more important that all should be subjected to abdominal incision.

As a rule, nothing more than the incision and evacuation of fluid and solid matter is necessary. Little, if any, manipulation of the viscera should be done. It is but a few in which it is necessary to close the opening in the gut by suture, it being best to allow free drainage with gauze.

The physician who encounters perforation in typhoid fever should not hesitate to immediately open the abdomen should he not be able to secure the advice and assistance of an experienced surgeon.

Errors in this as in all other kinds of surgery are expected, especially in confounding diseases of the appendix with typhoid fever. Operation is necessary when perforation occurs from any cause, and must not therefore be relegated for other means which can only be followed by disaster.

In conclusion, I would say that it is far more dangerous to allow perforation from typhoid ulcer to go unattended

than for the operation to be made by the most inexperienced physician.

"The Trinidad."

HAS THE USE OF INTESTINAL ANTISEPTICS IN TYPHOID FEVER A RATIONAL PHYSIOLOGICAL BASIS?

BY D. S. HANSON, M.D.,
CLEVELAND, O.

In order to study this question intelligently, it becomes necessary to go into a brief analysis of the digestive processes, that we may better decide the question, can the intestinal tract be disinfected and the formation of toxins limited?

The digestive process begins in the mouth, the saliva having amylolytic properties, but is in no sense a disinfectant.

Next in the stomach proteolytic digestion is begun and partially completed before contents are forced through pylorus. The gastric secretion is markedly antiseptic, bacteria rarely being found in the stomach.

The secretion of the glands of Brunner is small in amount, resembles that of the peptic glands of the stomach, hence is an antiseptic.

The secretion of the pancreas has three distinct enzymes; the trypsin acts upon the albuminoids, the amyllopsin on the starches, and the steapsin is a fat-splitting ferment. The entire secretion is decidedly antiseptic and will not readily decompose outside the body. (Contents of a pancreatic cyst can be kept for days without decomposition.)

Bile is partly an excretory product, but plays an important part in the splitting up and absorption of fat. The other functions of liver do not so immediately concern digestion that they need be mentioned here. Bile is readily decomposed and has very feeble antiseptic properties. When a biliary fistula is present the excreta only have a putrescent odor when fats or meats are eaten, and then is said probably to be due to the fact that the fat coats over

the intestinal contents so that the other ferments gain access to them with difficulty.

The follicles of Lieberkuhn secrete an alkaline fluid that acts upon the entire contents of the intestine excepting the proteids and fats. This secretion is not decidedly antiseptic.

Recent physiological observations (two cases reported by Howell) show that the proteids are not decomposed in the small intestine, unless taken in large quantities, but some of the carbohydrates are, this being no doubt due to the fact that the contents of the small intestine remain acid throughout. To the contrary, "in the large intestine the alkaline reaction of the secretion is more than enough to neutralize the organic acids arising from the decomposition of the carbohydrates, and the reaction of the contents of the large intestine is therefore alkaline and the proteids are decomposed."

The practical point that we get from this short review is that bacterial decomposition does not take place to any great extent in the small intestine because the contents remain acid, but as soon as the acidity is neutralized or contents become alkaline decomposition is much more rapid, and that the secretion of the glands of the stomach is the great antiseptic, and that of the pancreas to a minor degree. This being the fact, what would naturally be expected from those remedies which rouse the secretions (calomel being the main representative), thereby disinfecting the intestine? It has never been claimed that the gastric secretion was increased by them, and that being the main antiseptic they must do good, if at all, in some other way.

The other class that act, not by stimulating physiological processes, but by direct antiseptics, would not disinfect a single dejection of a typhoid patient if all given during the entire attack were added to it. In other words, enough to have any appreciable effect cannot safely be administered. Typhoid fever probably does not begin in the alimentary tract, at least its first effects are not found there, but in the nervous system. Possibly there is a general in-

fection. To disinfect the whole system would certainly be an impossibility.

We must always remember that two forms of digestion are going on in the intestinal canal, that of the enzymes of the secretions and bacterial action. We can best limit the latter by assisting the former.

The rational medication to produce intestinal disinfection from a physiological standpoint would be to fortify the action of the peptic glands by administering hydrochloric acid, thereby maintaining the acid condition of small intestine, and no doubt will do a little in that line, but the effect is not sufficiently marked to be hardly noticeable. This, with a bitter tonic, as cinchona and strychnia, is about the best that can be done unless some special indication exists. The so-called antiseptic and eliminative treatment is as useless in the latter respect as impossible in the former.

I one time saw a case where the doctor was congratulating himself upon the fact that he had a good start in treatment, for he had the intestines well cleared (patient had twenty-three movements during next two days). Mild cases do not need such treatment, and are often made worse by irritating the intestines with purgatives, while reliable data will support me in saying severe ones should have the benefit of the Brand baths.

1419 Broadway.

Diagnosis of German Measles (Rötheln).

Dr. Blaschko, of Berlin (*Deutsche Medizinal-Zeitung*, No. 14, 1898), as a result of years of practical experience, considers rötheln a weakened form of measles. He diagnoses rötheln when during the course of a measles epidemic the children have a slight fever and a reddish eruption with an elevation of the cutaneous papillæ, without any eye pains, coryza, or catarrh of the air passages; when the appetite and general condition do not suffer, the redness becomes of lighter color in a few days, and the skin desquamates very slightly or not at all; and when the child has had measles before.—*N. Y. Med. Record*.

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of April 25, 1898.

The President, LOUIS SCHWAB, M.D.,
in the Chair.

W. H. CRANE, M. D., Secretary.

[TELEPHONE NO. 1981.]

Operation for Mastoid Disease.

DR. LOUIS STRICKER: The case I present is a successful operation for mastoid disease, done January 12, 1897. This patient gives a history of having had whooping cough at three years of age, and at that time very serious middle-ear disease, which was operated upon, an incision being made back of the ear (Wilde's cut), and from that time on until the 12th of January she has had two sinuses back of the ear which were continuously discharging pus. In the meantime she had never been seen by a physician, so that for twenty years this suppuration and necrosis have been going on in the mastoid. When I saw her she was semi-conscious, and complained of dizziness; had a temperature of 99.8°. It was impossible to gain any view of the auditory meatus, because it was so swollen that it was closed, and pus was exuding from each of these sinuses. I tried to persuade her to go to a hospital, but was unsuccessful. Feeling that it was imperative that something be done at once, and with the assistance and advice of my friend Dr. John W. Murphey, I performed this operation in my office. The patient was under the anesthetic one hour and fifteen minutes. She remained at the office four hours after the operation, and was then taken home in a cab. On making the incision the entire mastoid process was found necrotic. The operation was not as difficult as it usually is, for the bone was easily broken down with a sharp spoon. After cleaning out all the pus and necrotic bone the opening was enlarged with the chisel until

the antrum was reached. We introduced a steel probe through the auditory meatus and cut out a triangular piece of bone between the base of the auditory meatus and the opening made by the chisel, thus making a modified Stacke operation. The communication between the auditory meatus and the opening was fully established, and was easily syringed out after the operation. Water was only used twice, after which it was treated dry (antiseptic gauze and boracic acid). There has been no purulent discharge since the second day, and the wound is almost closed now. I did not close the wound at the time of operation because I thought probably it would be better to leave it open, fearing purulent discharge might continue and permeate the mastoid again. The patient still has an opening in the tympanum, which never will close. Notwithstanding this, there has never been any further discharge. The hearing is *nil* on that side, and always has been.

DISCUSSION.

DR. S. C. AYRES: This reminds me of a case which I had about twelve or thirteen years ago. The woman had a purulent inflammation, and there seemed at the time to be no involvement of the mastoid, but there was considerable swelling. I made Wilde's incision and the patient got entirely well. Five years later she came back to me with a severe suppurative inflammation of the middle ear. I punctured the drum membrane three times. Nevertheless, in spite of this, the disease continued. I then made the ordinary mastoid operation and found the antrum and cells full of pus. The suppuration ceased at once, and she now is apparently well, and has perfect restoration of the hearing. It is seldom we have perfect restoration of the hearing in these cases after two attacks of suppuration. I think this was due to the fact that when the second attack occurred she sought advice very promptly.

Intra-Ligamentous Fibroid.

DR. JOSEPH RANSOHOFF: The first specimen that I wish to present is one I had considerable hesitation in present-

ing. It was removed this morning from woman forty-two years of age, who suffered considerably from abdominal pains and pains reflected down the thigh. Upon examination a tumor in the pelvis was discovered, and I thought probably we had to deal with a solid tumor of the ovary. It seemed to me to move entirely independently of the uterus. Making a laparotomy this morning, I discovered, however, that it was a tumor of the uterus, a fibroid that had grown out into the right lateral ligament. The operation was rather more difficult than those I have had to make, as a rule, for the removal of fibroid tumors, but it was rendered comparatively easy, I think, by dividing the ligament, catching the uterine artery on one side and then dividing the uterus to get at the ovarian artery and the uterine artery on the other side, after the uterus had been severed. I confess in this case I was decidedly in error in the matter of diagnosis. But when the uterus is examined, if one conceive this tumor in the right broad ligament, one might very readily mistake it for a growth quite separate and distinct from the uterus itself.

DISCUSSION.

DR. J. M. WITHROW: It is my impression that it is not unusual to find a fibroid tumor of the uterus extending into the broad ligament. It is a rather unfortunate and difficult complication to overcome, because of the broad base it gives to the mass to be removed. But it may often be enucleated as was done here, by going on the opposite side and enucleating the smaller side of the uterus and liberating the side containing the mass. What was the age of the patient?

DR. RANSOHOFF: I think about forty.

DR. WITHROW: What was the principal symptom for which the operation was done?

DR. RANSOHOFF: The pain was the chief symptom.

DR. WITHROW: It is to be presumed a tumor of this size would produce pressure symptoms. Its incarceration would prevent its rising into the abdomen, which would under ordinary

circumstances prevent pressure symptoms.

DR. EDWIN RICKETTS: In connection with this I want to report a case in which I had an intra-ligamentous tumor smaller than this, about as large as a good-sized orange, and in that case we had fixed symptoms. It seems strange that in this case we did not have more of fixation symptoms than Dr. Ransohoff gives us. In the removal of the tumor in my case I resorted to the operation so ably presented by Dr. Hall. The tumor was removed with but little loss of blood. The recovery has been satisfactory. Any one dealing with a few of these cases in the old way, in which the older operators said it was almost sure death to try to enucleate them, and then dealing with them in the modern way suggested by Dr. Hall, would be gratified by the manner in which they can be turned out. The doctor is to be congratulated, and there is certainly no condemnation here for his lack of diagnosing the case. I must say I am in the same boat with him, for in the last case I operated upon I did not make the diagnosis of inter-ligamentous tumor prior to operation.

DR. B. M. RICKETTS: I would like to know the contents of this tumor.

DR. RANSOHOFF: It has not been examined.

DR. RICKETTS: It looks like it might be a polyp.

DR. RUFUS B. HALL: The doctor states that he made an error in diagnosis, but it does not matter much whether he made a correct diagnosis or not, for when he opened the abdomen he would do the proper operation any way, and would only find a greater operation than he expected. The case only emphasizes the fact that we can tell better the exact condition after opening the abdomen than we can before we open it.

Lympho-Sarcoma of the Neck.

DR. RANSOHOFF: The other specimen is more in my line. I present it only on account of one feature of interest. About twelve or fourteen days ago a little girl, eleven years of age, was sent here from Kentucky. She was

perfectly well until about four months ago, when there developed on the right side of the neck a tumor, first in the region of the parotid gland at the angle of the jaw, that extended rapidly downward as low as the supra-sternal notch. The emaciation was associated with elevations of temperature, and during the two or three days she was under observation here she never was without an abnormal temperature, although it never exceeded 101.5°. The most marked feature during the last few weeks of her illness, the father told me, was the swelling of the feet, which came on every day, and the enormous dropsy of the eyelids. This was most marked in the morning. I saw her in the afternoon, and did not believe the existence of this, but the next morning I saw there was a very distinct dropsical condition of the eyelids.

I asked the interne to make a careful examination of the urine, and he found it not only loaded with albumen, but it also contained blood cells and epithelial casts. It looked like a case of acute nephritis. My judgment in this case was that the condition of the kidneys was in all probability the result of sepsis, the toxemia from the tumor of the neck.

The tumor of the neck, which I here show, could readily be made out. It was not movable from above downward, but it was movable from side to side. Its glandular origin could be recognized without difficulty. It was so large that the larynx was pushed over. The child was hardly able to go to bed at night, but sat up most of the night on account of the difficulty of breathing. The diagnosis was lympho-sarcoma, with absorption, the absorption giving rise to albuminuria.

The patient was operated on a week ago last Friday. The horse-shoe incision, with the convexity outward, was made, the incision going through the sterno-cleido mastoid muscle. All the glands were removed together. At the time of the operation these glands were found adherent to the internal jugular vein. We knew that would be the condition before operation. About an inch of the internal jugular vein was removed

with the tumor. At the time of the operation this inch was fully two inches; it has, under the formalin, contracted a good deal.

The reason I present this tumor is not on account of the difficulty of the operation or the character of the case, but on account of the fact that since the removal of this tumor the patient's temperature has been normal, and for the last three or four days her urine has been absolutely normal. There is no longer blood in the urine, nor casts on the most careful search. So the inference drawn before the operation, that the kidney symptoms were entirely toxic in character and might be relieved by operation, has been borne out by the subsequent history of the case. A microscopical examination of the specimen has been made, and it is a typical lympho-sarcoma. These cases are not very rare, but it is not often we are so fortunate as to get cases in which the infection is limited to one chain of glands. This patient was examined as thoroughly as possible before the operation, and these were the only glands found that were enlarged.

DISCUSSION.

DR. EDWIN RICKETTS: What was the anesthetic?

DR. RANSOHOFF: Morphia and chloroform.

DR. S. P. KRAMER: Was the child cyanotic?

DR. RANSOHOFF: The child was not cyanotic.

QUESTION: Has the dropsy disappeared?

DR. RANSOHOFF: Yes; there is not a sign of dropsy. The whole thing has healed by first intention. The character of lympho-sarcoma is of course *sub judice*. It is not improbable that this girl may have similar neoplasms elsewhere, where they may not be so easily reached.

DR. B. M. RICKETTS: This reminds me of two cases in which I made three operations for lympho-sarcoma. One of the gentlemen here this evening will remember one case, in which I made the operation twice. The first time I removed eighteen ounces of

glands from the right side of the neck, and a year later I removed fourteen ounces of glands from the right side of the neck. I was not so fortunate as Dr. Ransohoff; I was unable to remove them *en masse*. It was necessary to dig them out. In the first operation there were two tumors twice the size of a hen's egg. In each operation I endeavored to get all the glands that could be felt. It was singular to me where they came from. There were no other glands enlarged in the body, but at the present time there has been a recurrence. We now have a tumor in the neck larger than we had at the first operation. The patient is a boy, eighteen years of age.

The other case was a child about nine years old, from whom I removed glands weighing five and one-half ounces. In that case we had a recurrence.

I have never seen a case where the recurrence took place in another part of the body. I am curious to know what the experience of the speaker is concerning that matter. We had a case reported by Dr. Lincoln Mussey some two years ago, in which he removed 129 glands, and it was a question at that time whether it was a lympho-sarcoma. The symptoms in the case of Dr. Ransohoff are of great interest, and are symptoms that were not present in either of the cases I have seen.

DR. KRAMER: It is very difficult to explain the toxic symptoms, if this is a sarcoma. In that regard there is nothing more difficult to diagnose than these tumors of the lymphatic glands of the neck, so much so that good authorities say one cannot make a clinical diagnosis, and the same thing is true of the pathological. The occurrence of an acute Bright's disease, it seems to me, would point more to an infectious disease than to a sarcoma. Acute Bright's disease is quite an evident sign of acute infectious disease, and for the most part wanting in sarcoma, although fever does occur in sarcoma.

DR. RANSOHOFF: In regard to the statement made by a previous speaker, that he had a good deal of difficulty digging out glands, that is a difficulty I never any longer have to deal with. I

never dig out glands in the neck or anywhere else. Unless I can present the glands as I did to-night, in a bunch, I feel that the operation has not been done with proper technique. The old method was to make a small incision, shell out a gland if possible, then make a little longer incision and shell out other glands. That is practiced even now to a certain extent with tubercular glands. Those operations are always endless, or almost endless. If I had attempted that in this case I am satisfied the operation would have been almost endless. There must be twenty glands at least in this mass that I removed. If one makes an incision and exposes the entire mass before he attempts to remove a single gland, and then gets well down under the bunch, he is able to remove not only the glands, but also the inter-glandular structure, which is just as important as the removal of the glands themselves. That is especially true of tubercular glands.

In regard to the prognosis of lympho-sarcoma, I think I have seen not a few cases operated upon in this way that have remained well. I am satisfied that it begins in one set of glands and extends from one gland to another. After general infection occurs and we have a large number of glands involved, the prognosis is almost hopeless.

It is almost impossible to make a diagnosis of lympho-sarcoma when you have only one set of glands involved. It is almost impossible to make a diagnosis with the microscope alone. In this case we had nothing but a relatively small amount of stroma with some cells. That might belong to simple hyperplasia, or to a beginning tuberculosis, but with the clinical history of the case the microscopical examination shows beyond a doubt that we had to deal with a lympho-sarcoma. The diagnosis of lympho-sarcoma was made before the tumor was removed, from the fact that not one of the glands has undergone caseation or suppuration. That does not belong to tuberculosis. The diagnosis was further made by the pushing to one side of the air channel. No matter how many glands tubercular in character one may have in the neck, one does not

find the air channel displaced. At least I do not recall a single case now in which there has been a displacement of the air-passages.

One of the previous speakers has referred to acute Bright's disease as being rather an indication of some infective process. Now, I do not know but this is really an infective process that we have to deal with. The trend of surgical thought certainly is to consider sarcoma an infectious disease, although conclusive proof is far from having been rendered.

The reason I presented this case was because of the unusual effect on the kidneys, and not because it was an operation that included the removal of an inch or more of the internal jugular vein, nor anything else but the peculiar kidney symptoms. Often we have a temperature exceeding 101.5°, but it is the rarest thing to have the kidneys involved. Hemorrhages from the kidneys or from all the mucosæ are not at all unusual in lympho-sarcoma when the disease is far advanced and involves the viscera. The albuminuria and hemorrhages then do not disappear. It is on account of the disappearance of all the kidney symptoms that I present this case. It bears out the thought I had before the operation, that the albuminuria with the blood cells and the epithelial casts and all the renal symptoms were the result of the toxic process primarily situated in the glands affected.

DR. J. M. WITHROW read a report of

*Fifty Cases of Abdominal Section
Without a Death (see p. 600).*

DISCUSSION.

DR. EDWIN RICKETTS: With reference to Case 39, it seems to me when a diagnosis of pus-tubes is made the operation should not be delayed so long. The doctor failed to give reasons. I have never seen patients with pus-tubes in such a condition as to be benefited by looking after them for any great length of time. The sooner section is done the better. The drainage by the vaginal route, as resorted to many of these cases, I want to take issue with. In such cases it is better to do a hysterectomy. I would rather see almost anything else

come into my office than a patient with a drainage-tube sticking out through the vagina.

DR. B. M. RICKETTS: I should like the gentleman to explain to the members of this Academy what an accordion drainage is and how beneficial it is. We have had it stated on this floor that gauze will not drain. I am glad the doctor drains with gauze.

DR. S. P. KRAMER: Does the gentleman know anything of the subsequent history of Case 49?

DR. E. GUSTAV ZINKE: I came in when the gentleman was in his forty-fifth case, so that I have not much to say, and if I rise to say anything at all this evening it is simply for the purpose of congratulating not only Dr. Withrow for his fine results, but also the profession of Cincinnati in general. The majority of us will remember the time when abdominal sections were made year after year and every case died. It simply demonstrates the progress that has been made in Cincinnati, not only so far as abdominal surgery is concerned, but also the aseptic treatment to which the patient is subjected subsequently, and the asepsis used during the operation. I think it is a matter of serious consideration as well as congratulation for us to be able to have a report of this kind made to the Cincinnati Academy, and I certainly congratulate Dr. Withrow on his splendid results.

DR. WITHROW: In reference to the criticism respecting the habit or practice of allowing the patient to remain in a hospital two months after a diagnosis of pyosalpinx had been made before operation, I have simply this to say, that the diagnosis was not made two months before the operation. I belong to that type of surgeons whose fingers do not see. I have seen as a result of conservative treatment, and every one of you has seen the same thing, that many cases of pelvic cellulitis with complete and dense matting of all the contents of the pelvis, where there was more or less fever, in many instances have gotten entirely well without incision. If I had known of the presence of the pus, I would certainly not have waited so long.

With respect to the drainage-tube

and the tube sticking down in the vagina, that such drainage is ideal nobody will claim; that the very condition for which this operation is done is ideal nobody will claim. In the two cases in which recovery was so tedious, I believe I should have removed the uterus at the time, although in both instances, allow me to say, I believe it would have put the patient's life in even greater jeopardy than it was, for those of you who have dug up incarcerated tubes and ovaries know how valuable the minutes are. It is a time when the man's judgment must decide each case for itself, whether to remove the uterus at once or drain. In this case the patient will recover and practically has recovered.

Vaginal drainage was used in a large number of these cases, and in only one case—and that still in the hospital—has the drainage continued.

Now one word in respect to the accordion drain. Glass drainage was not used in this last series of cases, and only rarely in the other series reported. The gauze drainage has usually been used in the following manner, whether in a hysterectomy or adhesion from pus-tubes. If the uterus and all the peritoneum is gone, it has been my custom to carry the drainage up far enough for the intestines to rest on its top. The gauze then furnishes a temporary joist. Gauze, like lampwick, will take out fluid but will leave in much of the *débris*. In cases in which there is likely to be drainage I carry in a curved drainage-tube, which will carry away as much fluid matter as may gravitate into the lower portion of Douglas' pouch. With respect to the use of drainage in these cases, what I have said explains the situation. When we have torn and riddled and ripped the whole of the pelvis back of the uterus, I believe that this best secures us against the ravages of infection and the possibility of hemorrhage.

Perforation of Ileum, Presumably from Typhoid.

DR. W. E. KIELY: On the afternoon of April 13, 1898, I saw Mrs. G., aged sixty, for the first time. Her daughter visited her in the city on the previous

day, and, not finding her well, induced her mother to accompany her home, some miles from the city, in a street-car. At supper she was taken with severe pain all over the abdomen, more marked in the ileo-cecal region. I found her with a pulse of 120, temperature 102°, tongue red and glazed, anorexia, face drawn and pinched, abdomen distended and very tender to touch, distention more marked in the region of the cecum; stomach irritable. From her daughter I learned that she had four muco-bloody stools during the night, and was at times slightly delirious. It was not difficult to recognize that she was suffering from peritonitis, but the problem that confronted me was what produced it. Appendicitis with perforation was the first cause that suggested itself; also cancer of the cecum and typhoid fever. In favor of cancer was an apparent hardened mass in the cecal region, her age, and the fact that she had previous attacks of vomiting and constipation; opposed to that condition was the indication of her having been well nourished and no great loss of flesh. The history at that time did not point to typhoid. In favor of appendicitis was the sudden attack, pain, collapse, and tenderness in the right iliac fossa. I gave it as my opinion that a perforation had taken place, possibly a ruptured appendix, and advised a laparotomy, which the patient refused to submit to, though all other members of the family desired it.

On April 14 the condition was same; temperature 100°.

April 15, weaker; temperature normal, pulse 124 and wiry. Ordered $\frac{1}{40}$ gr. strychnine nitrate every hour; $\frac{1}{4}$ gr. morphine suppositories when needed to relieve pain.

April 16 Dr. Hinckley saw the case in consultation, and concurred in the opinion as to the necessity for an exploratory incision. On that day and for the first time I was informed by the son that she had had diarrhea for two weeks previous to my visit, and was compelled to lie down a part of each day from weakness; he could not tell whether she had had fever.

The possibility of its being a per-

foration from typhoid then occurred to me. From that time until April 22, when she died, there was a slow but gradual dissolution; stomach scarcely retained any nourishment, and bowels were relieved of the distention in part by enemata.

Two hours after death an autopsy was made by Dr. Porter, one of the house physicians of St. Mary's Hospital, and I herewith append the salient points of his extensive report:

Incision made from ensiform cartilage to pubes. On exposing the intestines they were found adherent and very much distended. Peritoneum darkened and flakes of lymph upon its surface. Omentum adherent to right side. Evidence of pus in right iliac fossa, and in attempting to separate the intestines a puncture was made into it, allowing the contents to flow over the field of observation. About this time Dr. Kiely found a perforation in the lower end of the intestine. Mesentery presented patches of ulceration and contained pus. After considerable difficulty the appendix was found matted in the inflammatory mass, and on its removal it was found to be perfectly normal.

DISCUSSION.

DR. J. L. CLEVELAND: I have nothing to say in regard to the case except that it is a most interesting case, and the doctor kept us guessing all through the report as to what it was going to be. It only illustrates how insidious the action of typhoid fever may be in some cases. It accentuates what many of us have seen and what we have all read and know, that we may have ulceration and perforation in mild cases of typhoid fever. I am very glad indeed that the doctor got a post-mortem on this case. It is certainly very satisfactory that we should hear of a case of this kind.

DR. KRAMER: I want to make a suggestion, that the Widal reaction is of some value in the diagnosis of typhoid fever.

DR. J. C. OLIVER: I think the report of the case by Dr. Kiely brings up some very interesting cases. I think that nine cases out of ten, barring the history of bloody stools, would have

been cases of appendicitis. Only within less than two weeks I was called to see a patient with abdominal pain. The patient was a young man, apparently about twenty-five years of age, who came to the doctor's office for the relief of abdominal pain. It was uncertain as to where the pain was the worst. After being in the doctor's office the pain became so intense that the man was unable to proceed back to his own home. The symptoms of acute peritonitis very rapidly developed, and the doctor kept the case under his immediate observation. The patient very rapidly went down. I saw the case half an hour after he died, so there was no operation made, but there was an autopsy made almost immediately after death, within an hour, and in that case we found what I would never have suspected—that is, a perforation of a duodenal ulcer. The earlier history was very obscure; in fact there did not seem to be any history of the case prior to the acute pain. Acute peritonitis could very readily be made out. I think it is Park, of Buffalo, who says in a case in which you have symptoms of acute sepsis with symptoms of intestinal obstruction, four times out of five you will reach the seat of the trouble if the incision is made in the right iliac fossa. In this case the perforation took place in the lower part of the ileum, so that incision in this case would have reached the seat of the trouble, whereas in the case I have just referred to it would not. Yet I suppose the majority of the surgeons would have considered that case, in the absence of post-mortem, a *foudroyant* case of appendicitis.

DR. H. M. BROWN: There was one point in Dr. Kiely's case that struck me as not like appendicitis—that is, the suddenness of the attack. My experience is that appendicitis comes rather slowly, and that, as a rule, it comes from congestion, from lying on damp ground or exposure to cold. In connection with rupture of an ulcer in typhoid fever, I have had several of these cases, and I have been able to diagnosticate them in my own mind, without the ability to describe the reason why, from the appearance of the individual's skin.

There is something in connection with the expression of the face which resembles what Dr. Kiely describes; it is not a distinct yellow, but something that suggests the condition.

DR. B. M. RICKETTS: Whether this was a case of typhoid fever or appendicitis it should have been operated upon. There was a chance for the patient's recovery if there had been an abdominal incision. So far as making the incision always on the right side to find the appendix, there are cases reported in which the appendix has been found on the left side.

DR. OLIVER: Would it not be on the right side four times out of five?

DR. RICKETTS: Perhaps, but we never know positively. A case was reported on this floor two weeks ago as having been operated upon for typhoid perforation. The diagnosis was appendicitis, and should have been so stated; and while the operation was just and proper in either event, the facts in the case should have been presented.

DR. W. E. SCHENCK: This is a case in which the blood examination, with the clinical history the doctor has given us, would tend to confirm a diagnosis of appendicitis. The case is a complicated typhoid, and instead of the leukemia, that we would find in the uncomplicated form, we would have found a *leucocytosis*, which, with the clinical history, would have been indicative of pus being present and the necessity for operative measures. Such an examination would have told ante-mortem what the autopsy revealed—that there was an abscess that was *not walled off*, and toxemia.

DR. KIELY: All the remarks that have been made suggested themselves to me, but I was not going to pack a microscope six or seven miles out into the country when I was satisfied an exploratory incision should be made. The relatives of the woman who were present all aided me to induce her to submit to operation. I did not get the history as I gave it until several days had passed; I got it in sections. From the diarrhea I suspected typhoid fever. A woman who rode several miles and helped to get the supper and presided at the table and then was suddenly

taken with pain would suggest very strongly appendicitis, yet I was not by any means of that opinion.

In regard to the remark that the pain of appendicitis is not acute in character, I would take issue with the gentleman. Before I left on my vacation last year I saw a man who had several attacks previously, who was taken with a violent pain Sunday night, terrific in character, and when I saw him on Monday I advised him to submit to operation. He had been treated for bowel trouble. I put my fingers over his appendix and told him what he had. His second attack was mild; his third attack, when I saw him, was causing intense pain. I told him he would submit to an operation or there would be suppuration. I saw him in the evening and found him easier, because I had given morphia. On Tuesday afternoon I mentioned every surgeon present in the city and advised him to call any of them to take charge of the case, for I was obliged to leave the city. A doctor was called and he agreed with my opinion and believed that suppuration had begun. The patient died thirty-six hours after I left the city. That is the history of very many cases.

An Interesting Case of Ophthalmia Neonatorum.

DR. S. C. AYRES: I had an interesting case, the result of ophthalmia neonatorum, a few days ago which I thought might be of interest to you. The history of the case was this: The doctor wrote me that the mother had passed through a dry labor and the membranes ruptured about six days before the child was born. When it was born the doctor examined the eyes immediately and found both eyes were suppurating. He immediately employed a trained nurse and took the very best care he could of the baby. One eye suppurated completely; in the other there was extensive ulceration of the cornea, but it partly cleared up and there is a bare chance of saving a little segment. It is one of the cases where treatment per vagina might have been of value. The child is six or seven months old.

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CINCINNATI, JUNE 11, 1898.

Editorial.

DISTRICT PHYSICIANS.

In Cincinnati there are distributed over the city some nineteen or twenty physicians holding appointments from the Board of City Affairs, whose business it is to professionally minister to the needs of the poor, for which there is given to each such physician a salary of twenty-five dollars per month. The amount is not at all extravagant, for which there are rendered services in single districts of several visits per day. Often the location of patients is distant many blocks from the doctor's office, making the service more or less onerous, and yet a refusal to attend such calls is practically unknown. The young men who accept these appointments do so from the purest of motives, and deserve all honor and commendation. The emolument is only a pittance, but it is easily collected, and meets necessary office expenses of the beginner who is in financial straits.

Heretofore much care has been exercised in making selection of these physicians, and the fact that a young man

held such an appointment has been a pretty clear guarantee that his professional and moral character was strictly reputable. So proud of their professional standing have been some of these gentlemen that in the recent appointment of a disreputable practitioner over them as Health Officer their resignations and cause of such action have been promptly tendered the Board of Affairs. This was a proper act, instigated by their own high sense of professional honor.

When it comes to pass that young physicians are ready and willing to give up the small modicum that seems to be actually necessary to minister to their daily necessities and keep the wolf from the door, there is manifested a degree of professional chivalry that is not surpassed by those who go forth to battle for the honor of their country's flag. When such conditions are observed, who is there so base as to defend the recent action of the Board of City Affairs in appointing an unscrupulous quack doctor as Health Officer of the city? In no single instance has there been found a reputable physician to defend the action of the Board of Affairs, and never was there a better illustration of callosity of cuticle than is found in the instance where one of the disowned Ishmaelites proclaims his readiness to meet the frowns and antipathies of more than eight hundred registered physicians. When a score or any other number of young men are willing to forego white bread rather than officially report to such a creature, it need not be wondered at that the entire medical profession is in a state of revolt.

The Health Officer has stated to a newspaper reporter that he is paying no attention to those physicians who are in opposition to him, which makes precious little difference. The Board of

Affairs will pay attention to the revolutionists, or the writer is greatly mistaken. Yet more, the political party that is responsible for his appointment will go down before an indignant medical profession as straw in the face of an electric fire. Political party margins in Cincinnati are at this moment on very ragged edges, which cannot be gainsaid.

This experience is an object-lesson to physicians that will not be forgotten in a generation, illustrating in great capital signs the necessity of a union of medical men for political purposes. It can now be seen that organization for this purpose is imperative. There is not a physician in Hamilton County who would not rather a hundred times over vote for a Congressman of other political affiliation than that of his individual preference than experience the ignominy of seeing a blatant quack in any official position.

When men come up as candidates for any political office, from that of Governor or Congressman down to Ward Councilman, such candidates must give a written pledge of allegiance to reputability in medicine or they will be snowed under by the votes of the medical profession. This can, must and shall be done. It is true that at the last city election for Mayor medical men were basely deceived, and it is possible they may be again, but the buzz-saw that is being faced by the present administration is not very likely to be called in requisition very soon again.

Eight hundred physicians have more political voting power than any other force of similar size that can be classed. There is only one requisite condition for their success, and that is a determination to stick together through thick and thin. When they do this their power is simply overwhelming, and it

is just such occasions as the present that are needed to produce cohesiveness.

There have been splendid demonstrations of this in the past, and as our whole Nation remembers the Maine, so in future political campaigns a united medical profession will remember Tenney.

THE CHILDREN'S FRIENDS.

The past week in local medical affairs has not been alone noted for changes in the Health Department; the annual meeting of one of the most distinguished and exclusive of organizations of medical men in the country, the American Pediatric Society, was held at the St. Nicholas the three first days of the month. Cincinnati was represented by Drs. Forchheimer and Rachford, and the duties of entertaining fell mostly into their hands. That they were able can be fully testified by all physicians who enjoyed their hospitality at Chester Park last Wednesday.

The good that such a body of men as these can accomplish by concerted action can hardly be overestimated. It was many years before the profession began to realize that a child is not a little man, and the terrible mortality still existing among young children, especially in large cities, shows how few now have their eyes opened to this fact. The collective work of this year was the society's report of infantile scurvy in this country. One such report as this at each meeting becomes most valuable aid to those whose practice brings them in contact with any considerable number of the diseases of childhood. Such collective investigations could well be imitated by all medical societies, regardless of their aim and scope, to the everlasting advantage of the medical profession.

Perhaps the most important factor in

the prevention and treatment of infant diseases is that of feeding. The following was given out for discussion: "Should all milk used for infant feeding be heated for the purpose of killing germs? If so, at what temperature and how long shall this temperature be continued?" While this and kindred topics are not new matter for medical discussion, nevertheless they must bear a stamp that only such an organization as this, the leader in this particular field, can give; not that all its members confine themselves to pediatrics and that alone—indeed, but two men in the country do that—but the work they have all done entitle their opinions to the very highest respect.

Cincinnatians were delighted to renew old ties with a former friend, once an interne in the Cincinnati Hospital, later a practitioner in this city, now one of Chicago's most successful men, Dr. Christopher, whose article on "The Fatigue Period of Childhood" at the present meeting was one of the most solid contributions, and opened a large field for thought and study.

It is to be hoped that the society's first experience in the West may tempt them to soon again pay us another visit.

M. A. B.

THE NEURON THEORY.

Readers of the LANCET-CLINIC will remember the extensively illustrated paper on this subject as it appeared in the issue of December 11, 1897, by Dr. D. I. Wolfstein, of this city. The doctor elaborated his paper, made it more complete, and submitted it, under the title of "The Neuron Theory as Related to Brain and Nerve Diseases, in the Light of the Most Recent Investigations," for the Fisk Fund Prize, given by the Rhode Island State Medical Society. The doctor has been noti-

fied that he is the successful competitor, in which he is to be warmly congratulated. The cash prize is \$350, and publication in monograph form at expense of the Fisk Fund.

Who is next in the Cincinnati Research Society to be heard from in a similar way?

THE first ambulance ship fitted out for war since the Geneva convention has now become part of the U. S. Navy. It bears the very appropriate name of Solace.

A NEW SEDATIVE IN WHOOPING-COUGH.—The use of sedatives forms an important element in the treatment of whooping-cough, for unless something is done to control the severe spasmodic attacks the little patient may succumb from exhaustion alone. In place of resorting to the use of narcotic sedatives, such as belladonna, it is often a better plan to administer a hypnotic which will induce refreshing sleep without any stupefying effect. Dr. Busdraghi (*St. Louis Med. Era*) gives the following valuable advice on this subject: In a little child, nothing is better than a placid sleep, durable and reparative. To obtain this in my cases, I have employed trional in doses of from 0.10 to 0.50 gramme, according to the age of the children. I have not seen any inconvenience from it. It has been tolerated perfectly well; the sleep has been interrupted by some efforts at coughing, but the sick child has again gone to sleep as if nothing had happened. In a few more obstinate cases I have added a spoonful of 1 per cent. solution of chloral hydrate.

PREVENTION OF UTERINE DISEASE.—Gonorrheal infection is now generally considered as one of the most important causes in the development of diseases of the female genital organs. The starting point is usually a gonorrheal process in the vagina, which, extending upward into the uterus and tubes, gives rise to endometritis, salpingitis, ovarian disease and peritonitis, and other serious lesions of the generative organs. For this reason the treatment of the primary vaginitis in as thorough manner as possible becomes of paramount importance. According to many practitioners, copious irrigation of the vagina with hot water and the use of Micajah's Medicated Uterine Wafers is the most efficient, agreeable and convenient method of accomplishing this. These wafers are not only strongly antiseptic, destroying the gonococcus, but astringent and alterative, subduing inflammation and promoting a rapid return to a healthy state. Write Micajah & Co., Warren, Pa., for samples.

Selections.

FROM CURRENT MEDICAL LITERATURE.

An Unusual Case of Genital Malformation.

Green (*Quarterly Medical Journal*, January, 1898) describes in an illustrated sketch the case of an individual aged twenty-four, who had always passed as a woman, doing duty as a housemaid, who consulted him for the relief of a feeling of weight and pain in the lower part of the abdomen. The patient was a brunette, with considerable mammary development, and the pubic hair stopped at the hypogastric fold.

On local examination the labia majora were found to be somewhat swollen, a condition which had existed as long as the patient could remember, and each labium contained an oval, movable body, the one on the right side being somewhat larger than that on the left. The clitoris appeared to be about half an inch long, and as thick as the little finger. Below this was an opening, too small to admit anything but a sound. A more careful investigation under an anesthetic revealed the fact that the labial swellings were testicles, the one on the right side about normal in size, while the opposite organ was about half size, and could be easily pushed up through the ring into the abdomen. The scrotum was completely split into halves, and the dartos was plainly evident. Of the penis only the glans was developed, the corpus spongiosum being absent. The former was imperforate at its extremity, but on the under side was a depression which resembled a meatus, which, however, would admit only the finest probe. Along the under surface of this rudimentary organ was a groove or furrow which terminated in an opening one and a half inches lower down. This furrow evidently represented the upper half of the urethra, the inferior wall being absent at this portion. A catheter passed into the opening, which was situated just in front of the triangular ligament, traversed a urethra about

two inches long. Rectal examination failed to reveal the presence of either uterus or prostate, although a thickening at the latter part gave indication of that organ. As it was considered unlawful for the patient to longer continue in female attire, and as he desired to remain a "woman," the testicles were successfully removed, and the asexual individual returned to domestic service.—*Med. Age.*

Treatment of Obesity.

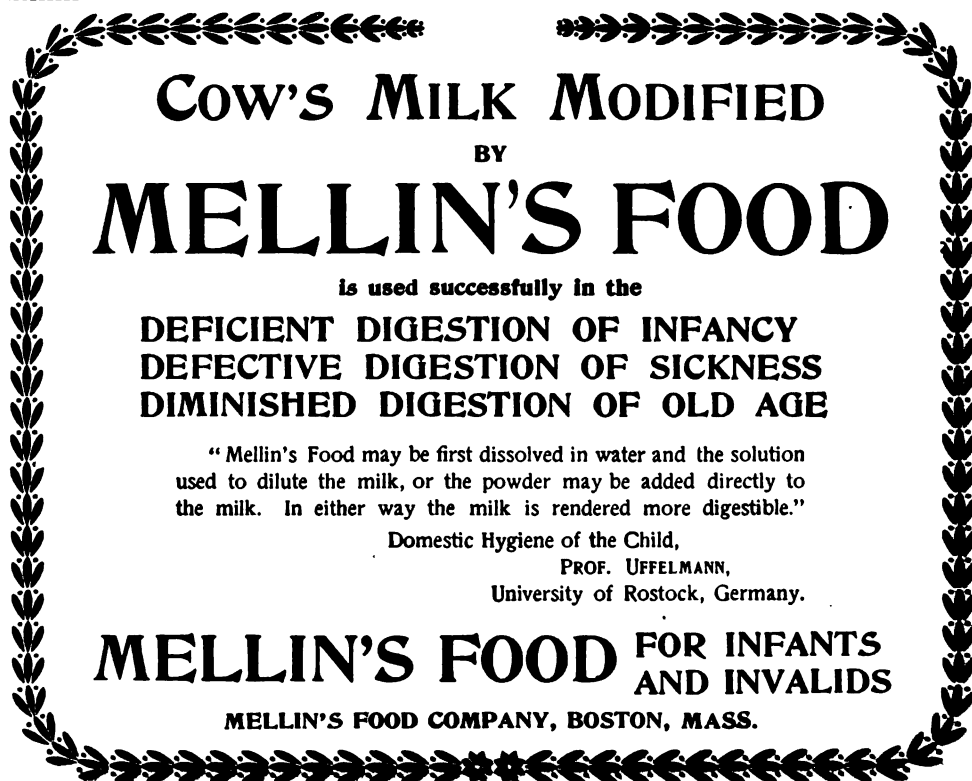
Dr. Cathell reports that he has had more than ordinary success in the last few years in the treatment of obesity with what seems a very simple method. He has his patients drink after each meal a glass of artificial Kissingen water, and on the succeeding day a glass of artificial Vichy water also half an hour after each meal. This is continued week after week until the patient comes down to a normal degree of stoutness, and the waters are then discontinued. As to mode of action taken by these waters in

the manner described he is not able to state, but their efficiency is too well established to admit of doubt.—*Med. Age.*

Legal Definition of "Maiden."

From an examination of the definitions of the foremost lexicographers, the Supreme Court of Vermont comes to the conclusion, in the case of the State vs. Scodrick, that the common ordinary meaning of the word "maiden" is a young unmarried female not necessarily a virgin, and this meaning of the word is adopted in construing an indictment of a man for adultery with a "maiden."—*Med. Age.*

THE regular physicians of Missouri are circulating a petition for signatures of those willing to vote against Governor Stevens because of his attitude toward the profession in the Fulton scandal. It has already reached an enormous size. They expect to see him defeated.—*American Medico Surgical Bulletin.*



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A Weekly Journal of Medicine and Surgery.

New Series Vol. XL.

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Whole Volume LXXIX.

Original Articles.

ICTERUS NEONATORUM.¹

BY JAMES W. ROWE, A.B., M.D.,
CINCINNATI.

The subject under consideration is one so hackneyed and so impracticable that its introduction may almost require a word of apology. So far as we can see, no possible advantage can result from the discovery of a correct explanation of icterus neonatorum, since no disastrous effects arise from the condition; nevertheless, it has constantly attracted the attention of the ablest physicians of various times and countries, and in spite of the immense amount of literature devoted to its consideration it still remains an unsettled and tantalizing problem of physiology. The term physiology is used because a condition so universal and so devoid of deleterious effects can scarcely be styled pathological. It is not, therefore, the possibility of the discovery of a prevention or a cure which makes the investigation of this subject of value, but the amount of physiological research and reflection which its proper consideration necessitates.

One is led in the search for a correct explanation of icterus neonatorum to study in turn the functions of the liver and alimentary canal, the composition of the blood, the bile and the urine.

The symptoms of the affection are familiar to all—merely a transient yellow discoloration of the skin and conjunctiva; the prognosis is absolutely favorable, the treatment nothing at all,

so that the chief interest centers in the etiology.

The theories of causation fall into two classes, the hematogenic and hepatogenic. It would be useless and burdensome to enumerate here the advocates of the various subdivisions of these classes. The hematogenic theory holds that a disintegration of red blood corpuscles takes place, freeing hemoglobin, and that this, with or without certain subsequent changes, gives rise to the yellow color.

Racchi, of Naples, has made some most conclusive researches upon the destruction of red blood corpuscles in infancy, which he reported at the International Medical Congress at Rome in 1895. He proved by blood counts upon successive days that while at birth the number of red blood corpuscles is in excess, within a few days the number is markedly reduced. So accurate are his observations that to controvert them is impossible; nor is it necessary in order to refute the hematogenic theory. That a tremendous destruction of red blood corpuscles does occur during the first few days of life is an established fact, but that this *per se* gives rise to icterus is extremely doubtful.

We can scarcely believe that the red blood corpuscles simply go to pieces in the blood and that the products of such disintegration floating freely about or temporarily lodged in the tissues give rise to the yellow color. It is far more in accordance with the workings of the living organism to suppose that the disintegration takes place in some organ, *e.g.*, liver, spleen or blood gland, and if the products thereof are floating about it is after passing such organ and on their way to final elimination. Hemoglobin itself dissolved in the blood as a result of the destruction of the red blood

¹ Read before the Academy of Medicine of Cincinnati, May 2, 1898.

corpuscles would not give rise to a yellow color, any more than if it were still in the stroma of the corpuscle.

We know that the color of hemoglobin varies from carmine to scarlet with the amount of oxygen in combination with it, but we do not know that by spontaneous disintegration it gives rise to a bright yellow pigment. If such pigment is produced it is more reasonable to suppose that it arises from the action of some chemical or vital force, and such a force is found acting in the liver. The liver goes on producing yellow pigment all through life, probably from the hemoglobin of destroyed corpuscles. It is reasonable to suppose that as the supply of corpuscles is especially large during the first few days of life the liver carries on this function with great vigor at that time.

It has been urged by the advocates of the hematogenic theory that late ligature of the cord is a cause of jaundice, because, by reason of the patency of the umbilical vein, the placental blood is forced into the system of the child by the uterine contractions. Under these circumstances there would be an unusually large number of red blood corpuscles for disintegration, and hence a more marked degree of icterus. Observers do not agree upon this point, however. Dr. J. Bazou, of Saone-sur-Marne, states that among midwives it is considered a proof of ability to tie the cord promptly, and since in France the majority of deliveries are conducted by midwives, why are so many French children icteric? He affirms that not the full-blooded, but the weakly infants, and especially twins, are subject to jaundice.

The hematogenic theory receives its crushing blow from the following observation. In those conditions in which the principal pathological phenomenon is a preponderance of destruction over regeneration of red blood corpuscles, we do not get a yellow discoloration, but a most pronounced whiteness.

The hepatogenic theory next demands attention. Birsch-Hirschfeld believed that as a result of decreased blood supply in the liver due to the cutting off of the placental circulation,

a condition of edema of the capsule of Glisson resulted. This caused a pressure upon the bile-ducts, and a transudation of coloring matter occurred into the blood. It is difficult to understand why a condition of edema should arise. Edema usually follows an obstruction of outflow with a continuance of inflow, and this condition must have continued for a certain length of time, until the walls of vessels become affected thereby, so that they permit the transudation. These conditions do not exist in infancy. On the other hand, the outflow from the liver is as unimpeded as ever, whereas the inflow is markedly decreased. One would expect a condition of abnormal dryness rather than one of edema to result. Furthermore, healthy ducts do not allow their contents to escape with every variation of external pressure.

Of all theories, that of Quincke lays greatest claim to credence. He held that bile pigment absorbed from the small intestine found its way into the general circulation through a patent ductus venosus Arantii.

The other causes mentioned, since they are universal, would necessitate the occurrence of icterus in all children, which, of course, is not the case. On the other hand, patency of the ductus venosus is a variable quantity, as is icterus neonatorum, so that in this case the objection is removed. It may be urged, however, that the secretion of bile occurs before birth, and at this time the ductus is not only open, but filled with a current of blood. By this avenue blood from the portal vein containing pigment might be turned from its proper course through the liver and carried directly into the general circulation. Therefore, why are children not all born icteric? This objection, apparently of some value, is after consideration definitely refuted by the answer that absorption from the intestinal canal does not occur until after birth. Absorption by the organs of the body, whether of oxygen or of food, is essentially a post-natal function. Only intelligent beings perform useless functions. The unreasoning organism responds to reflex irritation alone. Therefore, so long as oxygen is supplied

through the placenta, the lungs are inactive, and they only begin to functionate when the supply through the umbilical cord is cut off. It is reasonable also to suppose that when the organism feels the need of food to supply waste, that the cells of the bowel provided for the purpose should begin their function of absorption. There is little in the intestine at this time of an absorbable nature except bile; therefore, they absorb it—a perfectly normal process, for not all the bile secreted is excreted, but a large amount is reabsorbed. This reabsorbed bile is taken into the branches of the portal vein, whose blood at this time has two paths for reaching the general circulation—the one, as in later life, through the liver; the other through the then patent ductus venosus Arantii. That pursuing the latter course carries with it the bile pigment reabsorbed from the small intestine to the heart and thence into the systemic circulation, where it acts exactly as in the ordinary obstructive jaundice of adults.

After all it may be possible in a measure to reconcile these apparently inconsistent theories. The great destruction of red blood corpuscles certainly favors an unusually large production of bile pigment, so that we must consider it at least as a predisposing cause. The other predisposing cause, occupying the same position that the weak, unresistant lungs do in the etiology of phthisis, is the patency of the ductus venosus Arantii. Just as the predisposed lungs may remain healthy until the ingress of the tubercle bacillus, so the fetus with a patent ductus venosus remains free from icterus until at birth the process of absorption is begun in the intestine. If now the ductus is promptly closed the child escapes the affection, otherwise it becomes jaundiced. We conclude, therefore, that the actual exciting cause of icterus neonatorum is the inception of the process of intestinal absorption.

[FOR DISCUSSION SEE P. 631.]

UNLESS there are special indications aseptic wounds do not need redressing for eight or ten days.

HYGIENE OF GRANULAR CONJUNCTIVITIS:

WITH SPECIAL REFERENCE TO THE UNITED STATES MILITARY SERVICE.¹

BY FRANCIS DOWLING, M.D.,

CINCINNATI,

MEMBER OF THE SOCIETY OF HYGIENE OF FRANCE;
MEMBER OF THE AMERICAN MEDICAL
ASSOCIATION, ETC.

The great rôle which granular conjunctivitis plays in the causation of blindness renders its successful management one of the great desiderata of our day. Granular conjunctivitis is a disease that is not confined to any country, but may be found, like poverty, in all quarters of the globe. Its great hot-beds are in some of the countries of the Orient, and here its ravages are great, probably owing to the intense heat and glare of the sun, together with the whirlwinds of sand that are almost constantly in operation in some of these eastern sections, and to these may be added the sudden changes of temperature that take place in these countries between day and night, and the consequent humidity of the night air. In continental Europe the disease occurs in a much milder form than in the countries of the Orient, and its ravages are not nearly so great.

The malady attacks particularly the poorer classes, and the rich and well-fed are comparatively free from the disease.

Certain races are particularly liable to the disease, as the Irish and the Jews. These latter are said to carry it with them all over the world, and transmit the liability to their descendants wherever they live. The disease is more frequent in persons between the ages of fifteen and forty-five years. In children under six years it is quite rare, and the same may be said of people over fifty.

The atmospheric condition exerts an influence on the causation of the disease. It does not become epidemic at a height of over 250 meters above the sea level, and it loses its contagious character at

¹ Read before the Academy of Medicine of Cincinnati, May 2, 1898.

this height. Low regions and swamps favor its spread.

The disease is highly contagious. So destructive is it to the sight that it will be safe to say that three-fifths of the blindness throughout the world is directly or indirectly due to this disease. Zehnder states that in Finland, in the year 1886, the proportion of the blind was 1 to 348 of the population, and the principal cause was granulated lids. Haynes Walton says that granular conjunctivitis is the most common cause of blindness in Ireland. According to a recent report published in the Transactions of the American Ophthalmological Society, 8 per cent. of the blind in the State of New York owe their condition to this disease.

When once this affection has secured a good foothold the patient is more or less seriously crippled for life.

This disease was known in Italy during the days of the Roman Empire. This is proven by a passage in Celsus, giving a full description of the malady.

The beginning of the nineteenth century brought with it a considerable spread of the disease, covering a large section of Europe, probably owing to the long wars which brought the armies of the continent in frequent contact with one another and with the civil population. The disease ravaged one country after another in the form of epidemics. The spread of this disease is favored by the dwelling together of many persons, as in barracks, on ship-board, etc., whereby the communication of the contagion from one person to another is facilitated. This communication is, as a rule, effected by the common use of such articles as towels, sponges, washing water, etc., from one or more who may have the disease, causing it to spread to others who may be healthy. At Mayence, in 1819, an epidemic of the disease broke out, and one-third of the Prussian army were attacked by it.

Contamination of the air through defective ventilation favors the spread of this disease. Mueller says that there is no danger in remaining a whole day in a ward filled with patients afflicted with this disease, but the night ought not to be spent in such a situation. He be-

lieves that the defective ventilation at night increases the infectious quality of the air. In schools where there are boarders, those who sleep in the institutions are more liable to contract the disease than the day scholars.

The first account we have of this disease appearing among soldiers dates from Napoleon's Egyptian expedition. At that time, 32,000 men, nearly his whole army, were affected by it, as were also the British troops who were in Egypt at that time. During the twenty years following the disease spread through almost all European armies. In the British army, in 1818, there were more than 5,000 blind invalids as a consequence of this disease. In the Prussian army, from 1813 to 1817, between 20,000 and 25,000 men were attacked, of whom 150 lost both, and 250 only one eye. In the Russian army, between 1816 and 1839, 76,000 men were affected; of these 876 lost one eye and 654 lost both eyes. In Italy 1,500 soldiers were attacked with the disease. In the Belgium army, in 1840, one out of every five soldiers had the disease, and up to 1834, 10,000 soldiers had lost one eye at least. In 1849 the disease first appeared in Portugal, and in eight years 10,000 soldiers were afflicted with it. In 1848 the disease visited Denmark, and in Copenhagen, out of some 6,000 soldiers, 1,000 were affected.

As in the army, so also in the navy the disease occurs, and in the navy it has raged with much greater severity than in the army. In 1875, in the Austrian navy, about every sixth man had the disease.

In almost all countries where the disease is prevalent to any great extent there exist special regulations relating to the trouble among the military classes. The most thorough and best of these are to be found in Belgium, among whose soldiers the disease is most prevalent.

PROPHYLAXIS.

In the first place, the army and navy surgeons should have a thorough knowledge of the disease, and not only a theoretical knowledge, but a practical one in relation to its treatment, its hygiene, etc.

Recruits who may be affected with this disease should be rejected on making application for entrance into our army and navy, even when the trouble is present only in light form, for they are at any time, owing to over-crowding, atmospheric conditions, etc., liable to develop into severe forms. In the German army recruits affected with this trouble are rejected. In the Belgium army they are accepted, providing the disease is not of a serious type.

It is essential to prevent over-crowding in barracks. Twenty-five cubic metres of air space ought to be allowed to each man, and provisions should be made for good ventilation. Every barrack's ward ought to be cleared out for a week or so at a time, at least once a year, so that they may be thoroughly ventilated and whitewashed. For washing purposes each soldier should have his own wash basin and his own towel, or, still better, instead of a basin each one should wash in running water furnished by faucets. In our army the soldiers wash in common, in large troughs.

A regular medical inspection of the soldiers' and sailors' eyes at regular intervals is of great importance, and to do this satisfactorily the eyelids ought to be everted as far back towards the cul-de-sac of the mucous membrane as possible; otherwise hidden granulations will often escape detection.

In Belgium every soldier applying for a furlough is examined, and it is only granted if he is free from this disease. In like manner he is examined on joining his regiment again at the expiration of his leave of absence.

The soldiers who may be affected with granular conjunctivitis ought to be isolated from the healthy ones—that is, placed in separate barracks; and these quarters ought to be thoroughly fumigated once a week with burning sulphur. In this way, and only in this way, in connection with proper treatment, can the disease be stamped out. In an asylum for boys near our city several years ago something over half of the inmates were affected with this disease. I followed this plan of disinfection and isolation, and in consequence in nearly

a year the disease was completely eradicated from the institution.

In recruiting, all subjects affected in the slightest degree with this disease should be promptly rejected.

Medical inspection of all soldiers should be made every four weeks.

Every one suffering from the disease should be sent to the military or naval hospital and treated until cured.

No soldier or sailor should be dismissed from the army or navy until thoroughly cured, when such a cure is at all possible.

In this way the spread of the disease amongst civilians from the military may be prevented.

TREATMENT.

The treatment usually recommended for this disease consists in touching the everted lids with one or more of the astringent and caustic applications, in either the solid form or in solutions of various strengths. The most popular of these is the sulphate of copper. Next in order of popularity and usefulness comes the mitigated nitrate of silver, in stick or solution. When used in solid form it should be washed off after being applied, as otherwise by continued use it is apt to leave scars and thus produce puckering of the tarsal mucous membrane. While I was in the late Professor Yaeger's clinic in Vienna, in 1883, the first trial was made there with the infusion of jequirity in the treatment of old cases of this trouble. All the assistants in the clinic thought they had at last found a panacea for this troublesome malady. They were consequently very much elated over a few cases in which, apparently, the remedy did great good. The popularity of the remedy was, however, of short duration, for it was found that the symptoms produced were so severe that in the majority of cases the treatment seemed to do more harm than good, except in some old cases with pannus complications.

Dr. Abadie, of Paris, has reported to the French Academy of Medicine the results of a series of experiments which he has made in the treatment of granular conjunctivitis by means of a 1 to 500 solution of bichloride of mercury. The

doctor first anesthetizes the patient by means of chloroform or ether; then the upper lid, for instance, is first everted completely, until the superior cul-de-sac is brought into view; this is accomplished by means of a pair of forceps made especially for this purpose. The granulated membrane is now pretty thoroughly scarified with a small bistoury. The solution of bichloride is next thoroughly rubbed in by means of a stiff brush. The rubbing is kept up until the bleeding has in a measure stopped, and the mucous surface resembles parchment in color. After a while the eyelid is released from the grasp of the forceps and returned to its normal position. The lid is to be afterward touched up, once a day, with the solution, until the granulations are eradicated. This, the doctor says, often occurs in three or four weeks, even in old cases, which, under the old treatment, took as many years to accomplish.

I have as yet had no experience with this mode of treatment, but should it possess all the merits claimed for it by its author it will prove a veritable boon to humanity.

Of the various other remedies which have from time to time been mentioned for the cure of this distressing malady, I will not take up your time with the discussion. Personally, I have had more success in my practice with touching the granulated lids with the solid stick of mitigated silver, and then immediately washing it off, than with any other remedy. This I do twice a week in old cases, and on the intervening days I rub in an ointment composed of atropia sulphate and yellow oxide of mercury. I also am particular to correct any trouble of refraction that may exist. This latter is very necessary, for the reason that if any error of refraction complicates the case, and be not attended to, the granular condition will persist under all sorts of treatment.

In addition to the local treatment, I invariably give some general treatment in the shape of tonics and alteratives. I am fully convinced that in a moderately well-advanced case of this disease we will rarely succeed in effecting a cure

by local treatment alone, for the reason that, underlying the local eye trouble, there is generally a perverted condition of the general nutrition, and this in itself is one of the potent factors in keeping up the local disease of the eye. I know I have been more successful with this combined treatment than with the local treatment alone.

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[FOR DISCUSSION SEE P. 632.]

Picric Acid a Valuable Remedy for Eczema.

The value of picric acid in the treatment of burns has long been recognized. It has the peculiar property of forming a closely adherent protective covering, through hardening of the epidermic structures of the skin, which enables it to render invaluable service in the treatment of burns. The protective covering not only prevents suppuration, but relieves pain by excluding the air. Aubert and Brousse have recently called attention to the fact that picric acid is equally valuable in the treatment of both acute and chronic eczema. It is of greatest value in acute eczema in which the skin has not been thickened, and especially in cases in which there is weakening and abrasion of the surface with much irritation. In chronic eczema it relieves the itching. It is less effective in relieving other symptoms. It should be employed at follows:

To a half pint of water add forty-five grains of picric acid. Wash the affected parts thoroughly with a saturated solution of boric acid, then paint the affected surface with the picric acid solution, including also a border of healthy surface. Cover the part with sheet lint saturated with the solution, and place over this a layer of cotton-wool or a pad of cheese-cloth. Do not apply gutta serena tissue or any other impervious covering. A certain amount of evaporation is desirable to prevent softening of the skin. Renew the dressing every two or three days.

Applied in this way, picric acid relieves itching promptly, and in acute cases effects a cure within ten or twelve days.—*Modern Medicine.*

EXTRA-UTERINE PREGNANCY.

BY F. F. BRYAN, M.D.,
GEORGETOWN, KY.

Extra-uterine pregnancy is better named ectopic gestation, as under this name no especial theory is involved in a nomenclature so broad. To Barnes the selection of this name is due.

Writers and investigators of this subject find a confusing mass of confused works to consult, but of the later authorities Campbell in 1842, Parry in 1876, Tait and A. Martin have worked the field to its present position. Tait says that the earliest authentic case of ectopic gestation was in the first half of the eleventh century. Very little progress was made in its thorough elucidation and treatment until the last fifty years. Since 1878 we have made the most satisfactory strides.

Numerous rational and irrational causes have been advanced to account for this unfortunate deviation from nature's custom. The most reasonable causes would be mechanical conditions such as offered an obstruction to the passage of the ovum into the uterine cavity. Gravity, muscular action and vibratile cilia are the best demonstrated factors for this end. Nervous influence certainly can only act as a general co-ordinating force. Now, anything which would interfere with one or more of these forces would of necessity tend under favorable influences to produce ectopic gestation. These causes are as familiar to the profession in general, to the gynecologist and pathologist especially, under the names of gonococcus, strepto- and staphylococci, together with any and all of the other members of the pus-producing family of germs. Traumatism in all of its forms can readily be understood to play both a direct and indirect part by making a favorable condition for the reception and growth of members of the pus family. I would state that the gonococci hold the first rank as a cause, and post-puerperal infection the second place. A thorough discussion of the *rationale* of these sub-suggested factors would be of interest, but the limit of this paper

of necessity will fall only within the pale of suggestion and emphatic statements.

Our views of the frequency of ectopic gestation has undergone, as might be expected, a marked change. From being a clinical curiosity it is now known to be a fairly frequent state of affairs. It is said to occur once in five hundred pregnancies. This will vary, not so much with the doctor and his ability to recognize this terrible calamity, as with the density of population and its inevitable consequences. Again, the clinician, the abdominal surgeon and all ranks of the profession are impressed with its importance, and with our improved knowledge and discriminating powers cases are being recognized that only a short time since would have been accredited to another cause.

The symptoms vary within the utmost limits, and will only be understood by him who takes the time element, the individuality of the patient, and the amount of change that has occurred judging from a normal standard. Ovarian, tubal, interstitial and combinations of these are expected to cover the location of the primary gestation; intra-ligamentous and abdominal the secondary or ruptured forms. A knowledge of the anatomy and physiology of these parts, with a consideration of the changes of the ovum in its course of development, prepares us to expect the many phases under which ectopic cases present themselves. In one the signs are *nil*; in another they are most appalling, with variations to and from each extreme. The usual signs of pregnancy are, if present, modified. If the menses for a time cease, they will, by the third month, reappear as an irregular discharge changed as to time, quantity and quality, so that the woman expresses her uneasiness in reference to her flow. The flow may be, and often is, accompanied by shreds that the microscope reveals to be the maternal elements of the placenta. Anxiety and dread seem in all cases that I have seen to be present. The patient will insist something is wrong, that she alternately believes she is pregnant, then she is not,

but is sure at all times that she is not in a normal condition. Abdominal discomfort is present, in some amounting to pain; in others tire or weight is the feeling complained of. Digestive and mammary symptoms may be present; if so, they are of value as attracting attention to the reproductive function. The changes in the vagina, cervix and body of the uterus will be only of auxiliary value in the symptoms that they furnish, development and size of the uterus being less than it should be for the presumed period of gestation. It is claimed that ballottement may be observed at the end of the third month; this, with the fetal heart sound occurring at the fourteenth to the eighteenth week, together with an abdominal tumor, will make pregnancy a certainty. Now we only have to determine that it is not uterine, and here physical signs, with analysis and exclusion, will be our chief reliance. The uterus will be enlarged and misplaced, but neither the enlargement nor changed position will correspond to the position or size of the uterus at such a period of pregnancy. The tumor's position will account for the position of the uterus. The tumor will be to one side, and more or less behind the uterus; in some fixed, in others movable, and give the impression of being superficially situated.

An early diagnosis is desirable, and will be made mostly on the physical symptoms referred to above, the subjective symptoms being so inconstant and variable as to be of suggestive and corroborative value only. The diagnostic pain so much appreciated, the muscular contractions, etc., are of value if present.

For treatment the expectant plan has its advocates; it should be mentioned to be condemned. No patient in this condition should be abandoned by expectancy to definite and known dangers contingent to an ectopic gestation.

Next, we have medical treatment, having for its object the death of the sac contents. This is to be attained by morphia, strychnia, atropia, or by electricity. It has been proposed and prac-

ticed to inject such drugs hypodermically into the sac; also by others to inject into the tissues of the mother the drug, with a view of obtaining their toxic action on the fetus, using such dose as will not cause a lethal effect to the mother. To use injections into the sac its tension should be lessened by withdrawal of a part of the amniotic fluid, as a weakening even by so slight a puncture may otherwise cause rupture or permit leakage.

Simple evacuation of the fluid in part or as a whole has been advocated. It should be condemned, the objection to it being that it is not only uncertain in producing the desired result, but has both immediate and remote dangers.

Electricity has been used, as galvanism and faradism; the latter only should be used, if either. Neiswanger, who is a great advocate for the faradic method, said to me that it was safe and sure. He says shock and current tension are the properties demanded, and that at any time during the life of the fetus one pole placed in the rectum or vagina, the other over the most prominent and superficial portion of the tumor, using a current that would correspond to a galvanic of 15 milliamperes, a *séance* of eight minutes being sufficient, a repetition rarely being necessary. An objection here is that after the early months a dead foreign substance is left for absorption, which we are by no means sure nature can eliminate satisfactorily. Again, if no other reason could be urged, rupture may be excited by the electrical excitement.

This is all that need be said about other methods except surgery, and in surgery we have the true method with which to deal with ectopic gestation in any and all of its phases. In cases of missed labor or abortive efforts on the part of nature to remove the products of an ectopic gestation, if seen and recognized, as it seems they should be, they should be at once operated; but if quiescence has been established and the condition of the patient will permit, it is best to wait for absorption of the amniotic fluid before proceeding to operate, as at this time the circulation in the placenta will have ceased, and

without risk from delay a gain will accrue by lessening the chances of hemorrhage.

It is recognized that if we first observe the case at one period or another that our resources as to surgical procedure is modified accordingly. It is a triumph to save a mother and child in these cases, which it is justifiable to attempt if we see the case after the fetal heart is heard and the case can be watched carefully, with all arrangements made to meet any and every danger arising. Under no other circumstances should we allow any sentiment or sophistry to induce us to give the child's life a thought, as its rights are entirely subservient at such a time to the mother's.

Within the first few weeks, if we are called upon, it will most likely be that the patient is suffering from a partial or complete rupture, with hemorrhage and consequent shock. Under these circumstances we imperatively have to meet the great primary surgical emergency, namely, to control bleeding. This is easily accomplished by opening the abdomen, then with the hand remove clots and go down to the seat of the bleeding, here clamp on each side of the source of hemorrhage with a long-jawed forcep, afterwards apply ligatures in such a manner as to obtain the best possible pedicle. Then remove everything beyond the ligature. If no septic state exists no drainage and a very indifferent toilet is to follow. If the patient is within herself from any cause septic or our technique faulty, a more careful toilet is demanded, but no tube or other drain is to be used unless we have a strong conviction that more bleeding will recur or sepsis is positively present. If I were to drain as a precaution that recurring hemorrhage could be sooner detected, I would use a glass tube; if on account of sepsis, I would prefer the Miculicz drain.

After the operation the rules that govern all abdominal operations are to be observed, adding the treatment for the special concomitant hemorrhage. That sepsis does occur in the majority of cases of rupture between the folds of the broad ligament that happen before

the twelfth week I have had two opportunities of verifying within the past sixteen months by operation. The treatment was carried out as indicated above, with recovery in both cases.

In those cases that are first seen after the formation of the placenta, the lines of treatment are, of course, subject to modification accordingly, but are yet clear. Here, after incision and removal of the fetus, we are called upon to avail ourselves of the most rational method of procedure. In one instance of leaving the placenta or removing it as may best be done under the existing circumstances, if it is so situated anatomically that a pedicle cannot be had, then, if possible, stitch the sac to the parietal peritoneum, using, of course, such available portions of peritoneum as will wall off the now inevitable source of sepsis, that it will be both extra-peritoneal and superficial as far as possible. If, unfortunately, this is not feasible, we must pack with gauze and so invite nature to give lymph and adhesions, thereby making an extra-peritoneal site for the changes that must occur, in time to forestall contamination of the general cavity. Of course, where satisfactory ligation of a pedicle *en masse* or in sections can be done it should be adopted, and thereby the quickest, safest and best results are guaranteed. When the placenta must be left, the question arises as to where the cord is to be severed. I favor enclosing the cord in gauze and allowing it to hang several inches out of the abdominal wound.

Should we first see the case when it becomes a lithopedion, quiescent or not, it should be removed. I wish to emphasize this in spite of authority to the contrary, whom I respect, but must differ with on the ground that, while many do well who are let alone, many do not, and both the mortality and the general health of mind and body are best served by operative measures in such cases.

It is, of course, apparent that each case is to a certain extent a law unto itself, and in no class of cases will there be more latitude. It is proverbial that the abdominal surgeon must be ready for any and everything when he opens

the abdomen. Here at one time he will only deal with the removal of the gestation sac and its contents in a way so simple as to be a matter of less difficulty than the removal of the appendages. This will be in most cases that are operated before the fourth month. The next class where the rupture has occurred and we operate to meet the indication of hemorrhage will be simple in proportion to the amount of blood that has been lost and the site of the pregnancy. This, in turn, will depend on the direction of the rupture and its extent. If intra-ligamentous, naturally, there will be less bleeding than when into the peritoneal cavity. Here always follow the rule applicable to all pelvic cases; that is, at once find the fundus uteri and from this landmark trace out what you are seeking for. Then we look in order to cases demanding operative procedures between the fourth month and full term. Here if we do the operation from election it is much more simplified than where necessity from rupture forces it upon us. In election the duration of the pregnancy will determine the size of the child and placenta. The size of the child will be a factor of danger and difficulty *per se*, the size of the placenta from its tendency to hemorrhage and its connections. Election here, as at all times, offers the best results, as we open the sac where it is most desirable as against emergency, while we avail ourselves of the best that is offered. As we may have, after removal of the fetus, to close the ruptured opening and make one for drainage in a more desirable situation, it will usually be impossible to safely remove the placenta. This should always be removed, however, if we can possibly satisfy ourselves that we can control bleeding afterwards. Operation where rupture occurs during missed labor differs in no way from those occurring from the fourth month on to term, of course except as from a more perfect development we may entertain a greater hope of saving the child, and after its removal the extremely careful and deliberate manner in which we are now to seek out every bleeding point separately, hook on forceps and

afterwards tie and finish with a careful toilet, drain from the fetal sac that has been left, letting drain come out with the cord. To operate for a dead or decomposing fetus will tax the skill and ingenuity of the operator, but the duty is urgent and should not be shirked. It is true that owing to situation and the varied changes one case may be simplicity personified, another may give adhesions, softened organs and intestines, sloughs in the abdomen, hemorrhage and every conceivable condition to cause dismay. Even though all this is true, T. G. Thomas, Tait and others have saved a large majority of their cases, and others are adding to the list.

Twin ectopic gestations have been recorded. A second ectopic case has been known to follow an operation for this cause. The right tube may be occluded and the gestation occur from an ovum developed on the opposite side, and *vice versa*. These facts have given rise to a discussion as to the propriety of removal of tubes and ovaries on both sides at all operations for abdominal pregnancies for fear of a future ectopic gestation, which, of course, would be more likely to occur after any abdominal interference. It is suggested that in all cases where disease exists that necessitates the opening of the and operation on the pelvic contents the operation be radical, all being removed that may give future trouble. This, for many obvious reasons, is to be condemned.

Without going into further detail of these innumerable variations, I would advise these cases to be operated, and that the operator be sure of his equipment, assistants and his own ability, when he will reasonably hope to have a successful termination of his case.

The authorities consulted in the preparation of this paper are Campbell, Parry, Lersham, Playfair, Lusk, Tait, Gregg Smith, Thomas and A. Martin.

WOUNDS about the face may be closed by a subcutaneous ligature, and thus render a scar less likely.—*Med. Summary.*

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of May 2, 1898.

The President, LOUIS SCHWAB, M.D.,
in the Chair.

W. H. CRANE, M.D., Secretary.

[TELEPHONE NO. 1981.]

Pessary Worn for Nineteen Years.

DR. EDWIN RICKETTS: I have a pessary here, removed after nineteen years of active service, which I would like to offer for your consideration to-night. It is a relic of past and present uterine barbarism. This ring pessary was placed in position nineteen years ago by a physician in a widow at that time forty-six years old; she is sixty-five years old at the present time. From that time the pessary was not disturbed, nor did her present physician know she wore a pessary at all. The patient was taken with great pain in the bowels and marked prostration on Saturday. The bowels had responded to free catharsis, and I saw her in consultation at 9 A. M. Sunday last. After going over the case thoroughly we were at a loss to account for the trouble, as the patient until this attack had enjoyed the best of health. It was suggested that a catheter be introduced into the urinary bladder. In this we failed because of an obstruction of some kind. The doctor then made a digital examination of the vagina, and with great difficulty removed this mass of what was once a ring pessary. The patient was in a semi-conscious state. The daughter then remembered that this instrument had been placed in position nineteen years ago. On washing out the vagina the state of its walls were a sight to behold—necrotic, dark, sloughing. We gave chloroform and opened the abdomen. We found no appendicitis, but only an infective peritonitis from this instrument. The patient died soon after being put to bed.

DISCUSSION.

DR. RUFUS B. HALL: The question of pessaries is one that I know Dr. Ricketts is especially interested in. This case that he reports is an exceedingly interesting one from several points of view. First, it emphasizes the great danger in placing a pessary and then losing sight of the patient. How the physician is always going to keep his patients under observation is a question that is pretty difficult to determine. Especially in the poorer classes, in clinic work, if you place a pessary for temporary relief in a woman nearing forty-five years of age, who requires a pessary for a relaxed condition, for temporary relief, suppose in such an instance the pessary is placed while you are preparing her for the necessary plastic operation that is to follow, she gets relief and disappears and years afterwards the condition is found that the doctor reports to-night, and then the physician receives a blessing from the friends and perhaps from the patient herself. It is not always the charity patient that goes away and leaves the doctor after she gets relief. Pay patients will get relief and decline an operation for the repair of tears. They cannot appreciate the necessity of having the pessary removed in a few weeks or a month or two. They go away for a year, or two or three perhaps, or even longer, and the pessary becomes a source of danger, as in this instance. But because we have these accidents following the use of the pessary, it does not follow that the pessary is no good. The pessary is only a makeshift to give relief, but sometimes it is very desirable to give the patient that relief. But I have had it impressed upon me a number of times that it is not well to let the patient get out from under your observation while wearing a pessary. But the pessary sometimes is useful. Take, for instance, the anterior fixation of the uterus. In all these cases I have found it best to have the patient wear a pessary for some time after the operation. I have had cases where the patient did not wear a retroversion pessary, and from some accident or jar of some kind the

uterus would become detached. For that reason I have insisted upon these patients wearing a retroversion pessary. But as to effecting a cure, I do not think the pessary has anything like the usefulness it has been supposed to have. I am glad that cases such as the doctor reports are not frequent. This is the first case I have knowledge of in which the patient has lost her life directly the result of the use of the pessary. But I have known pessaries to be worn several months, and the patients would wonder the cause of the nasty discharge, and would come to the doctor, forgetting they had a pessary. After the pessary was removed they would be well. I think every physician in active practice can recall one or more cases in which a neglected pessary has been left to the discomfort of the patient. But for that reason we should not say that pessaries do not do temporary good.

DR. B. M. RICKETTS: A woman came under my observation with an old pessary in the vagina twenty-three years.

DR. R. C. HILL: I would like the doctor to explain why he opened the abdomen in this case.

DR. MAGNUS A. TATE: I would like to report a case that has some interest as far as the pessary is concerned. A patient came to me four years ago with a decided tear of the perineum and prolapsus of the uterus. I spoke to her of the necessity of an operation for repairing the perineum, but under no circumstances would she or her husband consider it. So I inserted a pessary; if I remember rightly it was either a Hodge or Smith pessary. I told her to come and see me in a few days and let me know how it was doing, as to whether it made any unequal pressure and retained the uterus in position. I did not hear anything of her until I saw her on the street about three weeks after, when I begged her to come and let me see how she was. I did not see her until three years later, and then she was pregnant about four months. During a very violent spell of vomiting I was called to see patient and found she had expelled the pessary.

DR. EDWIN RICKETTS: The question was asked why the abdomen was opened.

It is stated in the report of this case that we made a diagnosis of peritonitis on account of the severe pain she suffered and from the amount of morphia it was necessary to use to keep her comfortable. It was one of those cases in which the family was ready for us to make an effort to save the patient's life.

QUESTION: What is the connection between the pessary and the peritonitis?

DR. RICKETTS: The condition of the vaginal mucous membrane was such that it was about as dark as my coat; there was a necrotic condition; there was sloughing at some points; although I was not able to make out any opening into the peritoneal cavity, yet the odor was very bad. After the abdomen was opened there were between one and two quarts of fluid poured out, about as bad in odor as the pessary removed from the vagina. There was no tympanites in this case; neither was there any distention of the abdomen. We simply drained with the hope of giving her a chance.

I am willing to acknowledge that the result of the long-continued use of this pessary only shows what neglect of these cases can do, as mentioned by Dr. Hall. I am not an advocate of the pessary; neither have I ever been, and I want to say that I have not but one case in which I am using a pessary, and that is in a patient with angina who has prolapse of the bladder and is in no condition to undergo operation. Outside of cases such as this, I do not see why anybody wants to resort to a pessary. The operation for retroversion, simply separating the bladder from the uterus, pulling the uterus down, shoving the bladder back and making the stitches, will in the majority of cases correct the trouble. I know this is a neglected case, and I only reported it for its uniqueness. After the removal of this pessary it seemed we had found a cause for the peritonitis. Here was a vigorous woman of sixty-five, who had never experienced any sickness outside of this trouble. Her physician did not know she was wearing a pessary, and only upon vaginal examination was this found. He was able to bring about free catharsis. There was no odor detected

from this patient while she was in bed. These points are in favor of the trouble being an infective pelvic peritonitis.

DR. TATE: Suppose the patient would not consider an operation?

DR. RICKETTS: I would simply ask her if she was the doctor or if I was her doctor.

DR. HALL: She would select her own doctor then.

DR. RICKETTS: That would be her privilege.

DR. HALL: Would you use a pessary for temporary relief while preparing the patient for operation?

DR. RICKETTS: I do not see any necessity of that. If you are going to do an operation, go ahead and do it. It is a good deal like waiting eight weeks to do a pus-tube operation.

DR. HILL: Were there any adhesions in the abdominal cavity?

DR. RICKETTS: Yes; the adhesions were decidedly marked. I am rather suspicious that there was an opening into the cavity, but I say frankly I did not find it.

DR. JAS. W. ROWE read a paper on *Icterus Neonatorum* (see p. 619).

DISCUSSION.

DR. WM. GILLESPIE: I had a case a short time ago which I would like the essayist to explain. The child was violently jaundiced for three weeks, with plenty of bile pigment in the feces and no excess of bile pigment in the urine. If some of this pigment got directly to the heart without going to the liver, why did we not have bile pigment in the urine?

DR. PERCY M. ASHBURN: I do not know very much about this subject in general, but I think the doctor disposed too lightly of the hematogenic theory. In pernicious anemia, where, if in any case, the destruction of the corpuscles in the blood is very great, there is nearly always a marked discoloration, and sometimes the icterus is so marked as to be greater than that of an ordinary catarrhal jaundice. In those conditions in which there is pallor there is not an excessive destruction and breaking up of the red cell as in pernicious anemia. In chlorosis the red cells are in excess;

in simple hemorrhagic anemia the red cells are not broken up in the blood, but they are discharged whole, so that the hemoglobin cannot be set free. The fact that hemoglobin varies from a straw color to a red need not lead us to believe that when it is set free in the blood it cannot produce jaundice. We do not know that it is a cause of jaundice, but that is certainly as probable as any other theory.

DR. E. W. MITCHELL: The paper is so exhaustive and the essayist has considered every theory so thoroughly that there is really nothing left to discuss. All I can do is to compliment the doctor upon the excellence of the paper. He has certainly presented the subject in a very excellent manner. I see no reason why we should not take for granted that there may be concerned here all three factors, and that there is an excess of pigment from the destruction of an excessive number of red blood corpuscles adding its quota to the blood stream, as well as the other causes that have been mentioned. I am sure I do not know how to answer the question Dr. Gillespie has asked. I would like Dr. Rowe to tell us whether examinations of the urine have shown an excess of bile pigment in the urine in these cases.

DR. ASHBURN: In cases of pernicious anemia is there generally not bile, too?

DR. MITCHELL: Of course, a very fair inference might be that the pigment is deposited in the tissues and is not excreted through the kidneys. That is a rather roundabout way of answering it.

DR. WILLIAM JUDKINS: In connection with the paper, I have really nothing to say, except to compliment the doctor upon the thoroughness of it. But in answer to Dr. Gillespie and Dr. Mitchell, in regard to bile pigment in the urine, I can call to mind a case a number of years ago of a little bastard, born about a month prematurely, with the most pronounced icterus I have ever seen. The labor was perfectly natural, the child born about the eighth month. There was an obstinate conjunctivitis set in on the fourth day, and I took the child, with the colored nurse, to our sainted friend, Dr. Joe Aub, who passed away ten years ago the 14th of this

month. He asked the nurse if it was not her child; it was so dark. In that case we had marked evidence of bile in the urine. The icterus continued for nearly four months. The child had an attack of bronchitis, during which Dr. Bartholow saw it in consultation. She recovered from the bronchitis, and during convalescence this discoloration of the skin disappeared. She is one of the most pronounced beauties there is in Covington, Ky., where she resides, or in Cincinnati, her birth-place. She is about nineteen years old now. The icterus disappeared and the urine cleared up at the same time that the capillary bronchitis vanished.

DR. ROWE: In reading over the report of Racchi's investigations I was very much struck with their apparent accuracy—that is, as far as one can judge from reading a report. The corpuscles were investigated with the hematometer and the hemoglobinometer and so on, and if I remember correctly the result of his observation was that he found bile pigment in the urine. In regard to Dr. Gillespie's case, I suppose some extraordinary activity of the skin or efficient action on the part of the kidneys would possibly account for it. I was impressed with the vast amount of literature and the theories that have been advanced and the exceptions to the little points and sub-divisions of each theory, so that the number of hypotheses amounts to scores—one might almost say hundreds. As the discussion is so entirely theoretical it is almost impossible for one who holds one opinion to convince one who holds a different one, especially when based upon certain clinical observations of his own. So I think it may be as well for us all to retire with the opinions with which we came.

DR. FRANCIS DOWLING read a paper entitled

*Hygiene of Granular Conjunctivitis,
with Special Reference to United
States Military Service*
(see p. 621).

DISCUSSION.

DR. DAVID DEBECK: The specific character of trachoma, of course, has

been questioned. It has been examined by several, and no less than two have claimed to discover the specific micro-organism, the micro-organism being a diplococcus and resembling the gonococcus of Neisser. Whether there is a true specific micro-organism here or whether we have a condition of the conjunctiva which is the result of modified action of the ordinary pus-formers, which is the view held by many; no matter which of these views is finally accepted, the question of the contagiousness of the disease is, I think, doubted by none.

The history extends back over centuries. In fact, one of the oldest hospitals in existence, in Paris, which celebrated its six hundredth anniversary recently, was originally founded to take care of three hundred trachoma cases. In fact, during the middle decades of this century it was spoken of as the military ophthalmia.

Now it seems to luxuriate in the region of the roller towel. You know in the rural districts the custom is to get up in the morning, go out and grab the tin basin, wash the face, and run down the roller towel until a comparatively dry place is found and use it. So we find the majority of these cases come from the rural districts. In Kentucky, Indiana and southern Ohio we get the majority of cases of trachoma, although in the crowded districts of the city it luxuriates as well. One of the best examples, perhaps, was in a protectory up in Ohio, where the boys sleep in large dormitories and use common washing utensils to a large extent. All the ninety-six boys in the institution were affected. Four of the members, whose duties were interior, in the house, were affected; two, whose duties were out and around the grounds, escaped.

The provisions for preventing its spread in the army, as given by the essayist, of course, are applicable and practicable. I don't really know as to what extent trachoma is prevalent in the United States army; I have heard no statement as to its prevalence among the troops, but it is unquestionable if a case of trachoma gets into the barracks, where I understand the sleeping arrange-

ments are very similar to ward arrangements or dormitory arrangements, and the washing utensils usually consist of a trough and probably the common use of towels, and if cases get in, there will probably be a rapid spread of the disease. As in any other contagious disease, the main element is preventing its entrance, and if a case is found in the ranks it should be isolated as you would any other contagious disease.

As regards the effect of the disease, there is no doubt but in the old cases that have been allowed to run on the little lymphoid bodies will undergo cicatricial changes, but the after-results or sequelæ of the disease are exceedingly grave. Quite a large proportion of the blindness in the asylums is caused by this.

The number of remedies advised, I think, is almost as extensive as the list we have for gonorrhea. I am not thoroughly posted on that particular disease, but it strikes me almost everything has been recommended. The general treatment can resolve itself into surgical and purely medical treatment. The surgical treatment consists in scarification and the rubbing in of antiseptics or astringents into the granulations, and perhaps as much effect would be accomplished with the stiff brush alone. Lately there has been proposed a so-called method of expression. The little granules are grasped with forceps, having little rollers in the points, such as those devised by Knapp and Dr. Ayres, of this city. By a little pressure the little rollers squeeze out the contents. There is another method, that of simply extirpating the conjunctiva, taking curved scissors and cutting off the granulating tissue, but on account of the cicatricial tissue resulting this has been abandoned. Then there is the purely medical treatment, such as the rubbing with sulphate of copper. It is almost needless for me to say that the treatment with the yellow oxide is rather a placebo. It does very well for the intermediary treatment, is a very nice emollient, and possibly has some little effect. The latest treatment, that has received some widespread acceptance, is the use of the infusion of jequirity, obtained from the

Abrus precatorius, or wild licorice, a plant found in Brazil, which was used there among the natives. It is prepared in this country, in the form generally used, sent out by Parke, Davis & Co.; I believe it is an alcoholic extract, which is then fixed with glycerine. It is permanent. The infusion made by grinding up the beans is, of course, spoiled in a short time. Some of the solution is brushed over the lids by means of a little cotton swab. It results in producing an inflammatory reaction, which resembles a croupous condition in the conjunctiva. There is a membrane formed over the conjunctiva, which is croupous in character. In a day or two this is shed in the form of a little film or shreds, and the puffiness of the lids soon subsides. The result seems to be that there is some irritative action or retrograde change; the granules undergo retrograde changes, and it leaves the conjunctiva, in my mind, in a better condition. There is a nearer return to the normal condition, it seems to me, than by any other method. It also has an extremely favorable effect in clearing up one of the gravest complications, the so-called pannus. In the course of a week or two the application can be renewed.

So that by the surgical treatment I have described or by the medical treatment, of one sort or another, the condition is not so grave and is not so great an opprobrium as it was some time ago. With proper care the cases can, of course, be kept out of such institutions or the military and navy ranks, or when found there can be isolated. Of course, it is well to take good care of our army and navy, although we need it only about three times in a century; but when we do need it we appear to need it somewhat badly.

DR. DOWLING: I have not very much to add. While I was in Paris I was in the clinic of a gentleman who was one of the greatest apostles of the method Dr. DeBeck mentioned, that of incising the membrane down to the cul-de-sac. The cure, so far as we could see, was worse than the condition for which we operated, for there was often inversion of the lid in consequence of puckering.

In regard to the infusion of jequirity, it did not seem to work very well in the Vienna clinic. It was finally abandoned, and they went over to the use of blue stone and nitrate of silver. Another method of treatment not mentioned, I believe, is touching the granulating masses with the fine point of a galvanocautery needle. This seems to work very well from what I have heard, although I have not used it myself. The granulating tissue is brought down to much the nature of the normal mucous membrane. In times of war, granular conjunctivitis is more apt to break out and become epidemic than in times of peace, when the sanitary conditions are better and the exposure to climatic vicissitudes are not so great.

Our distinguished Surgeon-General, Dr. Sternberg, who is so wideawake in matters of hygiene and bacteriology, would no doubt order any necessary reforms in regard to the soldiers having their own separate washing utensils, etc., if the matter were brought to his attention. He has done a great deal since he has been at the head of the medical corps of our army to stir up the energy of the army surgeons, and among other things they are now required to pass examinations in bacteriology, even for promotion, and in all other medical matters they are expected to keep abreast of the times.

Roentgen Ray and Bismuth Capsules in the Diagnosis of Pyloric or Intestinal Obstruction.

Drs. Boas and Dorn, in *Deut. med. Woch.* (Vol. xxiv, No. 2, 1898), report that they found that if an ordinary gelatine capsule filled with metallic bismuth is swallowed, its course through the alimentary canal may be outlined by the Roentgen ray. In cases of obstruction of the pylorus, or some portions of the intestines, this capsule is found arrested at the certain locality for days. They have made this observation by testing this procedure on fourteen patients with gastric affections, and recommend it as an excellent means of diagnosis. — *American Medico-Surgical Bulletin.*

THE Cincinnati Lancet-Clinic.


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DR. J. C. OULBERTSON,
317 W. SEVENTH ST., CINCINNATI, O.

CINCINNATI, JUNE 18, 1898.

Editorial.

INSOLATION.

The article that appeared in one of the morning papers regarding the proposed changes the Health Officer intends to make in the treatment of cases of insolation at the Cincinnati Hospital, it is to be hoped, for his sake, emanated only from the fertile imagination of some space-writing newspaper man. In the first place, he has no more right in the Cincinnati Hospital than—well, than a reporter. In the second place, the records of treating this class of cases by the methods in vogue for the last five or six years, and it is safe to say they will be the same this year, show greater success than at any time previous. Indeed, the insolation mortality during this period has been less than at any institution in the world. Late reports show but three deaths in one hundred and twenty-four cases. In Philadelphia, during one day two years ago, fifty-four cases were struck and eighteen died. This, of course, was not due to faulty treatment, but that treatment could not be instituted promptly enough owing to

the long distances cases had to be carried before arriving at institutions where proper remedial agents could be applied.

The present receiving physician of the hospital, Dr. Shields, has treated and treated successfully as many if not more cases of insolation during the first stage than any man in the country. It is rather absurd, to say the least, for one who has probably never seen a case of heat-stroke to wish to dictate changes in a treatment so entirely successful and satisfactory. Does the Health Officer wish, perhaps, to apply his homeopathic treatment and attempt to lower temperature by using a hot bath with the hope that in a few hours, more or less, a perspiration will come ambling along and reduce the temperature as in malaria? Or will he start with a hot bath and gradually cool it, because forsooth he fears the heart will not be able to stand the shock? Clinical proof shows that, as a matter of fact, the heart stands the shock exceedingly well. But will it stand the terribly high temperature longer than a very short time? Indeed, no. The cases that die are the ones that have been exposed the longest, the ones whose temperatures have reached the highest, the ones whose temperatures are most unstable, requiring constant watch lest they shoot up—yes, literally shoot up—to fatal heights. While we of late have learned that insolation is due to some toxin, nevertheless our indication for treatment has remained unchanged, namely, to lower the temperature—at whatever cost, to lower the temperature to safe bounds.

The present Health Officer has done admirably well thus far in pursuance of his plan of "masterly inactivity," and he would do well to continue so doing to the end; let him keep his fingers out of the hospital pie lest he burn them.

M. A. B.

THE WAR.

The United States government is steadily pressing the enemy to close quarters. There is no relaxation, no let up, and success accompanies our armies and sailors.

Much has been said against a prosecution of a war in the tropics in the summer season, and illustrations presented of a dreadful mortality, such as that which has followed other wars in hot climates, as likely to ensue, forgetting that the world of science has moved and medicine has not been in the rear. The science of hygiene is now an accompaniment of the soldier, and surrounds him with a protective environment which makes possible that which was impossible. Malignant diseases are defied and wiped out of the way as with a sponge in the hands of an expert. Thus the horrors of war are mitigated. An aggressive war with new troops has been waged for two months with a loss of less than two hundred soldiers and sailors in the American forces. This is very remarkable indeed, when the destructiveness of modern weapons is considered. Sickness is at a minimum. The season is early, and more serious disasters are to be expected, and yet these may not come.

A new army and navy is always likely to make mistakes. Thus far these have been few and small. In all of this there is a lesson, previously mentioned in these pages. History is being made rapidly. The United States is passing into the manhood and maturity of national life. Swaddling clothes have slipped off, and knee-breeches discarded.

Without discriminating against or belittling any department of science, it may be truthfully said that modern medical science and its artful applica-

tion has made possible just such campaigns as those now waged in the tropics.

At this writing it seems probable that ere long American battle-ships and cruisers will be belching forth their missiles in the ports of Spain itself. Then will come peace, and with it an immediate demand for from five to ten thousand American physicians in the new lands possessed by the United States. These men will be needed there for many good reasons—to practice medicine, to redeem the unsanitary conditions which now exist, and to educate the people in ways of living a new life, all of which are in the province of educated physicians. A university at Havana, another at Manilla, and each with a medical department, will need to be organized and put in motion. This will involve the creation of a new civilization.

It has already been demonstrated that the inferior in intellectual force must give way in presence of the superior. It is knowledge, the know how and its use that controls the affairs of all men and of all nations. The American medical profession know how and will teach millions of untaught how to live, and what to live for. Health, common schools, and scientifically conducted industries will do the business.

To have the opportunity, ability and enthusiasm necessary for so magnificent and grand a work as that now in view cannot again come to any people. Rapid transit of thought, intelligence, people and freights makes close neighbors of those who live on opposite sides of the globe. Forty—yes, thirty, or even twenty—years ago the United States did not want the Philippines, Carolines, Ladrões or Hawaiian Isles, nor was Porto Rico or Cuba regarded

with favor for annexation. The time, however, has come, and seemingly the people are rapidly ripening, for the inevitable unification of all of those peoples and their assimilation under the Stars and Stripes.

There are those who are slow to see and slow to realize the dawning of a new era in the life of the great American Republic, but the momentum is established, and the force of seventy millions of people who can read, write and cipher cannot be stopped. Some of the royal monarchs of Europe and their nobles are beginning to suffer from strabismus, see double as they neurotically make observations of what is transpiring, and are seriously questioning the fighting strength of their own great standing armies and the monarchical policy of keeping them in position. To them it is anomalous, marvellous, wonderful, and almost miraculous, that a Nation with a standing army of less than twenty-five thousand men should in the space of six weeks mobilize and put in the field more than two hundred thousand soldiers and have them in good shape, armed, equipped and ready to do the duty of veterans in tropic lands. The skill of American sailor gunners strikes them in a way that produces national angina pectoris.

The pessimist says to just wait a little and the United States will get bumped. All right, sir; but the nation can't wait. The pace is set, and we are in for the war. Physicians, chaplains and Major-Generals commanding are said to be non-combatants, but their services are not the less valuable, and their numbers are decimated just like the lines of private soldiers. The footings at the summing up tell the story. Assistant Surgeon Gibbs was one of four to be killed this week in a skirmish in Cuba.

THE CINCINNATI HOSPITAL.

The new forces injected into the management of this institution are at work. Good has already been accomplished, and there is more to come.

Horrible tales are told of the nastiness in the receiving department of the hospital, which should never have been permitted to exist. This will be remedied, and in doing so it will be just as well as not that the Trustees inquire into the necessity of a receiving physician. It is quite probable that a better qualified diagnostician could not be found than the one now in the place, and it is equally possible that he may not be responsible for some septic conditions existing in his department; but somebody is responsible. An abolition of the position of receiving physician and of the pay ward would simplify the workings of the hospital very greatly.

Last week a daily paper reported that the police had in some way heard that a girl had fallen or been knocked down stairs in her own home and injured. The police patrol wagon was sent for to take her to the hospital. Why, no one seemed to know, but the officers were determined to take her; but she resisted, and so did her parents, and the hospital lost a patient.

The downright evil of the Cincinnati police patrol wagon service cannot be too strongly condemned. The whole police service seems to be diverted from hunting criminals to that of detecting instances of sick and injured people, with a view of hauling them off to the Cincinnati Hospital. The people should know, and know it thoroughly, that in going into that institution they not only make paupers of themselves, but go into bath-tubs patronized by the trashiest tramps that ever puked the contents of a beer- and whisky-laden stomach. Soap

and water judiciously used will make clean, but the very best of hired servants are sometimes remiss in their duties. The bed linen may be clean, but it has all passed through the same laundry machinery with that of the most abhorrently filthy. This pertains alike to the pay and general wards. It is simply a vile practice, originating the writer knows not where or with whom, but it exists.

Who wants to go into the Cincinnati Hospital? Only those who are ignorant of existing conditions, and under a widely mistaken notion that better facilities for treatment are to be found there than elsewhere, and that the medical staff is composed of the very best men in the city. No words of reproach can be uttered against the skill of the medical and surgical staffs, but they are not one single bit superior in professional attainments to one or two hundred other men.

Hospital patients are paupers, no matter how much money they may have. They associate with fellow-paupers, eat pauper bread, sleep between sheets laundried with other sheets from beds where other paupers have defiled them, and so on clear through the category of diseased conditions of life until and after death among paupers.

It is not always a disgrace to be a pauper, but it is a disgrace for men or women who can pay for medical attention to permit themselves to be carried into a so-called pay ward in a pauper institution.

MAMMON IN THE CHURCH.

The Cincinnati LANCET-CLINIC is not exactly a church organ, but its editor is to some extent interested in the religious work of churches. This

work sustains such intimate relationship with that of the medical profession that it is utterly impossible to divorce them, even if such a proceeding were desirable; the bonds are indissoluble. Hence it is that the church is deeply interested in medicine and in the medical profession, while physicians are correspondingly interested in religion and churches. It is a representation of the temporal and spiritual going along together with a Siamese-twin attachment holding them together.

These thoughts are brought out through a call from an exceedingly pleasant gentleman who handed the writer a business card of the "Western Methodist Book Concern, Printers, Engravers, Binders, Electrotypers, 220-222 West Fourth Street, Cincinnati." The introduction being through, the gentleman said he was canvassing for the mechanical department of the Book Concern, and would like to have an opportunity to bid for the work of the LANCET-CLINIC. The writer suggested that possibly the Methodist Church, which conducts and owns the Concern, was departing from the lines of legitimate church work when it went out and sought through solicitors the commercial patronage of the public; that the work of the church was supposed to be mainly of a spiritual character, and devoted to a salvation of souls through conversion of the unconverted and a bettering of the condition of the poor and helpless, instead of going out into the highways and byways in search of business that was of a purely mercantile character for the financial profit there is in it, they competing with working people in business. It struck the writer that the church was getting into the Mammon field pretty far when such methods were being adopted.

For the church to have its own

office and work-rooms for the printing and disseminating of its own church and other religious literature no exception can be taken, but when the field of Mammon is deliberately entered, with the deliberate purpose of rivalling other men and firms in business, it seemed to be very much out of its own proper and legitimate field.

As the gentleman who called was a clergyman, a very active and good one at that, the hospital diversion of patients from the hands of their medical attendants very naturally came up, in which it was further shown that the church was out and in the fields of commerce and even professional trade for the lucre there is in it. The gentleman's attention was directed to the present scandal in the United States Senate where the Methodist Church is openly charged with obtaining more than two hundred thousand dollars by false pretenses.

No one can more sincerely regret such criminal practice upon the part of any church than the writer, and such a blow as this will be hard to recover from, and on account of it there should be a sitting in sack cloth and ashes by some people. As a body the membership of the Methodist Church is perfectly innocent, but still the church as an organization is accountable.

This evil mentioned is but an outgrowth of the ravening desire for wealth such as is displayed by the Western Methodist Book Concern of Cincinnati when it enters as a competitor for trade in common commercial fields. Its hospital in this city is now conducted upon a commercial basis, not as a charity, except as charity is made to further the financial betterment of the institution. Out for gold, that is the scheme; get it honestly if they can, but get it. That is the text devoid of glittering generalities.

The Methodist Church is only better and worse in its commercial drives than other churches in proportion to its aggressiveness in Mammon's field. So long as the church does the Good Samaritan act, confining its hospital work to purely charity patients, it has the sympathy and coöperation of the medical profession, but when the church becomes blind in its work, and takes to methods belonging to purely worldly occupations, thereby lowering the capital and business of its own members, there is something wrong. So, too, when it deliberately sets about the work of depleting the practice of reputable physicians by tolling patients out of their hands into hospital wards there is a wrong done that is despicable.

Some leaders among the church people will do well to consider these things, and do it on their knees and in their pulpits. Corruption like that shown up in Washington is the natural sequel of church commercial methods. One follows the other as naturally as the phenomenon of water running down hill.

EDITORIAL NOTES.

MRS. DR. ELIZABETH K. WRENN, formerly of Cincinnati, died at Placer-ville, California, May 23, 1898.

DR. JOSEPH M. MATHEWS, of Louisville, was elected President of the American Medical Association at its late meeting, and Columbus, O., named as the next meeting place.

THE Charles Elihu Slocum Library, at the Ohio Wesleyan University, Delaware, O., will be dedicated Monday, June, 20, at 2 P.M. Dr. Slocum is a legitimate descendant of the tribe of Abou Ben Adhem. His good works are not alone visible to the eyes of

others, but he lives to see them himself. He is the executor of his own will. The writer regrets inability to be present on this interesting occasion.

THE doctors of Washington, D. C., have demanded lower telephone rates. They have ordered all their telephones taken out unless the rates asked for are granted.

THE FIRST NATHAN LEWIS HATFIELD PRIZE FOR ORIGINAL RESEARCH IN MEDICINE.—The College of Physicians of Philadelphia announces through its committee that the sum of five hundred dollars will be awarded to the author of the best essay in competition for the above prize.

Subject: "A Pathological and Clinical Study of the Thymus Gland and Its Relations."

Essays must be submitted on or before January 1, 1900.

Each essay must be typewritten, designated by a motto or device, and accompanied by a sealed envelope bearing the same motto or device and containing the name and address of the author. No envelope will be opened except that which accompanies the successful essay.

The committee will return the unsuccessful essays if reclaimed by their respective writers or their agents within one year.

The committee reserves the right not to make an award if no essay submitted is considered worthy of the prize.

The treatment of the subject must, in accordance with the conditions of the trust, embody original observations or researches or original deductions.

The competition shall be open to members of the medical profession and men of science in the United States.

The original of the successful essay shall become the property of the College of Physicians.

The trustees shall have full control of the publication of the memorial essay. It shall be published in the transactions of the college, and also when expedient as a separate issue.

Address J. C. WILSON, M.D.,
219 South Thirteenth Street,
Philadelphia, Pa.

A USEFUL CHART.—Write to The Imperial Granum Food Company, New Haven, Conn., for sample copies of their new "Nursing World Fever Chart" for recording the vital signs and other information relating to the BATHS given in the treatment of fever cases. It is very complete and will be found especially useful in typhoid fever.

Translations.

PARISIAN MEDICAL CHIT-CHAT.

BY T. C. M.

The Duration of Vaccinal Immunity—Medical Practice with Medical Consultation—Doctors and Dentists in London—Tuberculine Cow Doctors—The Mal de Misere—Disease Germs in Holy Water—More Success of the Pasteur Treatment of Rabies—A Medical Prince—German Morality.

St. Yves Menard has lately sent a communication to the Society of Medicine giving the results obtained by vaccination at different ages:

From 6 to 10 years.....	16 per 100
At 10 years (schools).....	18 " "
From 20 years (military)...	50 " "
" 20 years to 40	60 " "
" 40 years to 60.....	74 " "
" 60 years to 80.....	82 " "
" 80 years to 100.....	88 " "

These statistics show that vaccinal immunity gradually disappears with time. At the age of seven years it has already ceased, and all children should be re-vaccinated again at that time. Re-vaccination, past sixty years, succeeds eight times out of ten, old men having overcome immunity from the vaccination.

La Revue Medecale de Quebec, one of the best medical journals in North America, is filled with excellent French news. We cull the following:

Mr. Helme gives some of the causes that injure physicians in their practice. He insists in particular on pseudo-patients who profit on all occasions by obtaining gratuitous advice from doctors. He says this tribe of rascals is tending to disappear, but all have had their own special methods. At a dinner party one of my neighbors at the table believed it to be her duty to ply a medical friend with questions. She told him all her domestic troubles, all the complaints of her husband and children. Encouraged by his patience, she then commenced to ask him questions about the diseases of

domestic animals. "My cat lost its hair," said she; "tell me some remedy, Doctor, to prevent pussy's hair from falling out." She had played the limit, for my friend coldly responded: "It needs no medicine, madam, but merely the application of hygienic measures. Keep it from riding the bicycle too much, and its small affliction will disappear." She asked him no more medical questions.

The great city of London has 34,642 physicians, almost half the number in the United States. These physicians must all have a diploma. There are 4,937 dentists in London, only 1,614 of whom have English diplomas. Strange to say, the best mechanical dentists throughout Europe, known as American dentists, come from the far Western city of Cincinnati, in the American State of Ohio, which has always been one of the leading dental college centres of the world.

The Chamber of Deputies will not leave behind it many regrets. There are in the meantime some types of law-makers whose disappearance will be much regretted. For instance, Mr. Denis, of Landes, who in a recent discussion on the budget for agricultural purposes claimed that two million francs should be asked to indemnify farmers whose cattle had been destroyed on the pretext that the herds were tuberculous. Mr. Denis declared that veterinaries abused their privileges. "They invoke statistics," said he, "but we protest against so-called men of science who, under pretext of saving our lives, render our lives intolerable. To-day veterinaries, like doctors, appear to be too learned. I should like to see the good old times back, when, in place of inventing diseases with new and barbarous names, doctors simply gave their patients purgatives and syrups. Many beautiful things have been said about tuberculine. Before this discovery our flocks and herds browsed around healthy and contented over hills and valleys, and tuberculosis never affected them nor their remote ancestors."

The growing tendency of sensational

sanitarians to experiment on public and private property will, in the end, meet with the fate it deserves. It must be granted, in the first place, that only a finely educated veterinary doctor is capable of making any kind of medical experiment on animals; and, in the second place, the use of agents whose effects are really uncertain or altogether unknown will never carry any evidence of proof to the thinking masses of the profession. A sensible family would prefer taking the risks of milk from cows that had never been inoculated with such an agent as tuberculine. If doctors, rabid on this question, would only inoculate themselves in experimentation, and show their faith in the value of such remedies, the world would be better off. It is high time that the "labor unions" of all countries should cause the passing of enactments forbidding public hospitals and public institutions from being the victims of medical experimentation.

"Les Morticoles," by the younger Daudet, has been greatly criticised abroad as being too bitter a satire on modern medicine, yet it is *almost truthful*. This work of Daudet's really merits an English translation. A translation for the use of "trade unions" and "labor organizations" would be in order, for it is the working classes who suffer in public hospitals in the so-called interests of medical science. Public hospitals connected with medical schools can never be run in the interest of the patients. The multiplicity of the hospitals is owing to the fact that the better a man is educated the quicker he will seek the refuge and quietude of private hospitals rather than run the risk of experimental doctors in public institutions.

Dr. Napier has lately written a paper entitled the "Mal de Misere." "Progress marches onward," says he, "slowly at times, but it marches on, overcoming all obstacles that attempt to block its way; nothing resists its invincible pressure. How many, many changes have been made by its good influences since the days of the Revolution, changes the material manifesta-

tions of which are visible on every hand, from the physical state of man up to the very soil he cultivates. The average of life, which in the last century was less than twenty-eight years, is now about thirty-eight years. Reforms in society are manifest everywhere; the world has become full of good spirits devoted to justice and the development of a universal democracy." He might have added that Germany, Italy and Spain will all become Republics within the next twenty-five years, if not sooner.

The multiple contact that holy water endures with fingers often far from aseptic, authorizes any one to suppose that in certain conditions this liquid is destined to play an important rôle in the diffusion of infectious maladies. Holy water (nothing is holy in the sight of the average bacteriologist) has been analyzed. One specimen taken from the font of a church at Sassais has been found to contain, according to Vincenzi, a multitude of germs—bacteria, staphylococci, streptococci, coli-bacilli, microbes, the bacilli of Loeffler, etc., etc., etc. Absolutely pure cultures of all varieties have been easily obtained. Experiments on animals with these cultures affirm the facts of their poisoning qualities. Diphtherial experimental infection developed edema at inoculated points, limpid exudations into the pleural cavities, hemorrhagic centres in the supra-renal capsules. Holy water, according to the deductions of bacteriologists, may then be the vehicle for spreading diphtheria, since many of the ever faithful have the habit of dipping their fingers in holy water and then carrying the poisoned fluid to their lips. At the time these experiments were made by Vincenzi, four cases of diphtheria, followed by one death, were reported at Sassais.

Since the germ hunters have proscribed the use of communion cups the presence of germs in the sacrament will be next in order. This interference of medicine with religion will meet with desired reprobation at the hands of the clergy. The world is very weary of the intrusion of pseudo-scientific medicine in all social and religious matters.

The germ theory must expect the antagonism of the faith cure; meantime, people will continue to die just the same. It is the charitable care of the very young and very aged, along with the sustenance of the crippled and infirm, that has increased human longevity as much as anything else.

* * *

Another cure has been added to the already tremendous list of cases that crown Pasteurian medicine with so much glory. On the 19th of March last a policeman named Hursaint, who attempted to kill a mad dog, was most cruelly bitten by the animal. He went to the "Pasteur Hospital" next day, and was treated for eighteen days, then discharged as *completely cured*. Hursaint, a few days after his complete cure, was attacked by violent hydrophobia and died. This is on a par with all the numerous alleged cures of the "Pasteur Institute," that are about as efficacious in the treatment of real rabies as the mad stone. Meantime, hydrophobia now numbers its hundreds of victims, where formerly such cases were rare. It seems one must be inoculated at a "Pasteur Institute," in order to acquire the malady.

* * *

Duke Theodore of Bavaria, the well-known oculist, has practiced for some time in the town of Biskra, in Algeria. Some of his cures soon made him very popular among the natives, and clients came to him from the far-off African deserts. Now there is talk of stopping the Prince from practice because he is not a legal practitioner. Laws that prevent any man from practicing cures are founded on very small and unjust legal grounds.

* * *

Two well-known personages in Germany, Maximilian Harden, the director of the review *Zukunft*, and Dr. Schweninger, physician of Prince Bismarck, have had a singular conference at Vienna, where a numerous assemblage was gathered. After each had pronounced a short allocution, they informed the public that they were ready to respond to all questions that might be asked. On this invitation a profound

silence at first reigned. No one seemed ready to ask a question. The silence threatened to be never ending, when Dr. Schweninger turned to Harden and remarked aloud: "It seems we inspire no confidence here." Then one of the audience, encouraged, exclaimed: "What do you think of Schenck's theory?" Dr. Schweninger thought but little of it. "If you can create at your own will a *hornunculus*, you could give it at your own will either a masculine or feminine sex. But you can do neither." Another one in the audience asked: "What is your opinion of Father Kneip?" to which Dr. Schweninger responded: "I have always regretted he was not a doctor, for if he had been a doctor in place of a priest I should have had the greatest faith in him." So the conversation continued until a late hour. It is evident that Vienna doctors are easily pleased.

Indications for Resection of the Urethra.

Roosing (*Klinisch-therapeutische Wochenschrift*, No. 7, 1898) gives the following:

1. In impermeable strictures.
2. In cases in which the stricture is elastic and immediately recurs after an attempt at dilatation, and above all in cases in which at the same time an ulcer or a suppurative urethritis exists back of the stricture.
3. When the stricture is of a peculiar character, diaphragmatic with an excentric opening, valve-like, or something similar, whereby we are enabled to enter one day and not the following.
4. When severe pain or hemorrhage from granulation masses renders a systematic bougie treatment impossible.
5. When a fistula remains permanently back of a stricture, as the remains of a peri-urethral abscess or an external urethrotomy. — *N. Y. Med. Journal*.

ONE grain of the bichromate of potassium dissolved in four ounces of water, a teaspoonful every two or three hours, will be found to give relief in loss of voice, hoarseness and in bronchial coughs.—*Med. Summary*.

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NEURASTHENIA.¹

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Neurasthenia was first fully described by Beard, by whom this name was given to the disease. To what extent it occurred in former ages is uncertain, but it appears to be on the increase in our own day. When first described it was supposed to prevail chiefly in America, and had even been termed in Germany and elsewhere the American disease; but it has since been found to occur very frequently also in Europe.

Neurasthenia is the most common disease of the nervous system—one, therefore, well worthy of the most careful study, and, I think, worthy the consideration and discussion of the Academy.

I shall not attempt in this paper to give a full description of the disease, but shall dwell rather upon some features of special interest or of practical value.

The causes and symptoms of neurasthenia are to a large extent like those of fatigue, and the disease has well been likened to chronic or pathological fatigue. It is not improbable that the condition of the nerve cells is much the same in each. We must suppose some altered molecular or chemical condition of the cell. With the recent methods of study of the nerve cells morphologic changes have been observed which have

been supposed to be the expression of different states of functional activity. Yet it has been acknowledged that the determination of such relation is exceedingly difficult. Hodge and others stimulated the nerve with electricity and then found changes in the nerve cells—the protoplasm shrunken and assuming a lighter stain, the nucleus irregular in outline, and taking on a darker stain. These changes have been supposed to be the expression of cell exhaustion, and it has been suggested that similar states of the cell may be found in fatigue and neurasthenia. But we do not know that this is true. In these experiments there was an abnormal irritation, and like changes have been found in the nerve cells after section of the cervical sympathetic. According to other investigations activity of the cell appears to be attended by increase of its size and a lessening of its chromatic substance.

Certain chemical changes are known to take place in the cell—that is, that the cells become more and more acid with increased activity. It is also known that the presence in the blood of the products of cell activity produce the symptoms of fatigue. Mosso produced the manifestations of fatigue in animals in a state of rest by injecting the blood of fatigued animals. It is often observed that fatigue of some muscles will lessen the strength of others, and muscle fatigue lessen brain vigor, and *vice versa*.

The theory of intoxication, or toxins in the cells, the products of their activity, and cause of manifestation of symptoms, has come much into vogue. But we do not know whether there is really this condition, or whether there is only cell inanition without the presence of toxic products.

¹ Read before the Academy of Medicine of Cincinnati, May 9, 1898.

Quite recently (*Neurolog. Centralblatt*, March 15, 1898) Biernacke has claimed that the blood in neurasthenics is abnormal, inasmuch as the quantity of fibrinogen and the proportion of the latter to the quantity of fibrin are not the same as in health. His theory is that the symptoms are the expression of disturbed oxydation on the nervous system, and he likens the disease to diabetes and gout.

Dana gives the following summary of the causes of neurasthenia:

1. Hereditary nerve sensitiveness.
2. Overwork and worry.
3. Severe shocks, with or without injuries.
4. Infections.
5. Stimulants and narcotics.
6. Abuse of the sexual functions.
7. Abuse of the digestive functions.

The predisposition plays a very important part. It has been, doubtless, present in the majority of cases of the disease. Again, in many cases it exists without neurasthenia ever developing, as the patient escapes exciting causes. The inheritance is usually from nervous parents, those with mild, rather than grave, nervous diseases; also from tuberculosis, rheumatism and gout in the ancestry. The acquired predisposition is largely from the patient's mode of life during a long period of time. I have been struck by the frequent occurrence, in my experience, of neurasthenia in man and wife. In some instances the disease may have occurred independently in each. But in most of them, in addition to the element of worry, the long presence of sickness of the one very likely acted in the way of suggestion in producing disease in the other.

Overwork and worry, next to hereditary influences, are probably the most important factors in the production of the disease.

Of the infectious diseases, the grip is more commonly followed by neurasthenia than any other, but this is doubtless due to its great prevalence. Looking over my case-book in connection with the preparation of this paper, I was surprised to see that of not a small number of physicians who had consulted

me for neurasthenia every one attributed his disease to the grip. But, if the assigned cause be not altogether erroneous, it is probable that the nervous disease was usually due to the character of the physician's work rather than to the virulence of the grip. For the physician usually continues his work as long as he can move about, and resumes it at the earliest possible moment, whilst his attack is likely to have come on when there was a special prevalence of disease, and he was working hardest.

Nervous shocks are very frequently the causes, at least the exciting causes, of neurasthenia. The most common instances are the nervous diseases following injuries, the so-called "railway spine," "traumatic neurosis," etc., in which the nervous symptoms are mostly due to the shock, rather than to any direct lesion produced by the trauma. Not rarely the shock is from a fright, or the sudden occurrence of psychic manifestations, obsessions, etc.

Freud, and some others, believe that sexual excitement or abuses are the most common causes of the "phobias."

The question of auto-intoxication as a cause of neurasthenia is a very obscure one, upon which as yet not much light has been thrown. Digestive disturbances are very common in this disease, and it is not improbable that toxic products are elaborated in the intestines and absorbed, or that there is imperfect metabolism in the liver, which becomes a source of auto-intoxication; nor is it unwise to keep such a theory in mind in the consideration of treatment, with the thought of helping the elimination of waste products, and promoting digestion and normal metabolism. Yet we must remember that as yet this is only theory. Even the relation of uric acid to nervous manifestations, of which so much has been said and written, is a matter that is mostly in the clouds.

To what extent do local diseases—of the eye, nose, uterus, ovaries, etc.—produce neurasthenia? That they may do so to the extent that they are a drain upon the system and injure the general health—any impairment of health may weaken the nervous system, and, thereby, predispose to neurasthenia—is clear.

But that such local disease produces neurasthenia in a reflex way, an idea at one time so generally entertained, is probably rarely true; and this is now the belief of some of the best men. I wish to emphasize this fact because I have seen so many cases where operations were resorted to simply to remove reflex causes of disease, to the great injury of the patient. On the day these words are written a lady living in the West consulted me, giving a history of a series of operations having been performed upon the pelvic organs, one following the other, not because of the slight local damage to be repaired, but because the preceding operations had failed to cure the nervous disease. The result of all these operations is that a comparatively trifling nervous disease, which should have readily yielded to constitutional treatment, has been converted into a very serious and extremely distressing condition.

Ziemssen has well described neurasthenia has a functional weakness of the nervous system, varying from the slightest degree in single localities to entire loss of strength of the whole nervous system. The symptoms will, therefore, vary greatly in different cases.

We may summarize the symptoms as follows:

Sense of exhaustion of mind and body, sense of effort to do anything, ready exhaustibility, mental irritability, sense of depression, dissatisfaction, worry, loss of ambition, apprehension, hopelessness, morbid fears, imperative ideas, weakened memory and power of attention;

nervousness, restlessness, insomnia, morning tire, tremor;

headache, sense of fullness, pressure, throbbing, etc., in the head;

vertigo or vertiginous sensations, noises in the head, spots before the eyes, hyperesthesia of eyes, ears, skin, etc.;

sense of numbness and other paresthesia;

palpitation, variable pulse, sighing respiration, etc.;

spinal irritation, irritation of the bladder, of the sexual organs;

dyspepsia, constipation, diarrhea;

dry skin, profuse perspiration, flush-

ing, pallor, cold extremities, loss of hair, loss of teeth;

urine of high or low specific gravity, deficient in quantity, rarely containing albumen or sugar, frequently with phosphates, uric acid, oxalate of lime and indican in excess;

anemia, loss of weight.

This long array of symptoms by no means presents all, but yet the most prominent neurasthenic symptoms. In selecting some of them for further consideration I shall, perhaps, devote most time to those of a mental cast.

The term irritable weakness is ordinarily applied to the most common array of symptoms. The patient is quickly exhausted, mentally and physically. A trifling exertion, or even the thought of doing anything, may seem a great effort. He feels a sense of incapacity, especially mental incapacity. At the same time he is nervous, excitable, irritable. He is likely to be annoyed by little things. A trifle may irritate him almost beyond endurance. Something of this "irritable weakness" is usually found, though it may be only slightly marked, and again present to a high degree.

A sense of worry, of apprehension and depression is also common. In part this is a physiological state. The patient is worried, anxious and depressed because of family sickness, financial trouble and the like, or on account of his own long illness and suffering, or because he fears paralysis, insanity, etc. But the same state of mind may appear as a primary condition. He has a sense of fear of he knows not what. An intense feeling of depression comes over him like a flash, without known cause. These states of feeling are the direct expression of the condition of the nerve cells. Here the disease resembles melancholia, and only the profoundness of the mental depression, with or without the presence of delusions, would distinguish the latter disease.

Most neurasthenics have unnecessary fears; are needlessly alarmed as to certain symptoms they carry with them. The patient suffers much with palpitation, and he believes he has heart disease. He has attacks of numbness in

the face, legs, or elsewhere, and believes he is to be paralyzed. He notices that his memory is weakened, that he cannot concentrate his attention as before; possibly he has a peculiar blank feeling or other distressed sensation in his head, and he believes he is losing his mind.

These are but a few of the fears that may be in the neurasthenic's mind. Nor is their presence an indifferent matter. Not only are they a source of mental distress, but they have also a profound influence on increasing and prolonging his disease. In finding and removing these fears the physician finds his greatest therapeutic power. But they are not, necessarily, easily removed. The continuance of symptoms tends to keep them up, so that it may require untiring patience on the part of the physician and unceasing efforts on the part of the patient to finally vanquish them.

Sometimes the fears are not affected by the physician's assurance. The patient keeps his belief and his fears in spite of all that is said. Here the condition is akin to delusion. It is really mental disease, and other symptoms are likely to follow.

Other symptoms occurring in neurasthenia may also merge into mental disease. For instance, the worry and constant self-observation may be present to that degree as to make the disease indistinguishable from hypochondriasis, while some of the mental manifestations bring it near to undeveloped paranoia.

Morbid fears and obsessions, though they often form a class of cases of their own, allied rather to the psychoses than the neuroses, appear so frequently in neurasthenics that they deserve mention in the description of the disease.

The morbid fears, "phobias," most commonly met with are the fear of being on high places; in open places—an open square, crossing a broad street, etc.; in closed places—church, theatre, or in any crowd. There are very many other fears, to every one of which a long Greek name has been applied, which I cannot take the time to mention. Very commonly with the sense of fear a violent train of symptoms arises, of which the most common are palpitation, vertigo, faintness and tremor.

Obsessions, or imperative ideas, are thoughts that flash unexpectedly into consciousness, a surprise, and often a terror, to the patient. Common instances are the thought of committing suicide, or homicide, often of a loved one; the thought of some kind of self-pollution, with constant impulse to abolutions; the idea of becoming insane, of having cancer, syphilis, or the like; the arising of strange words, often sacrilegious thoughts, in the mind; states of doubt and questioning. Such obsessions occur in varying number and with varying persistency and intensity in different individuals. They sometimes initiate the neurasthenic state. Three illustrations of this beginning of neurasthenia I have now under observation. In the first, while shaving himself, the sudden thought that he was going insane flashed through the patient's mind. The second, whilst in the barber's chair, was unexpectedly seized with the fear that he would cut his own throat. The third, on ship-board, was suddenly seized with the idea she would throw her beloved child into the water. In each instance the patient was terrorized by the sudden thought, and severe neurasthenia followed. Whether the imperative idea was merely the beginning of, or really caused, the neurasthenia, it is difficult to say, but, at least, it must have greatly increased the intensity of the disease.

One of the most common symptoms of neurasthenia is some kind of discomfort about the head. Sometimes this is headache, more likely to occur in women, and more by day than by night, and occasionally very persistent. But headache is far less frequent than other distressing sensations about the head. Very often the patient speaks of a sense of weight or pressure at the back of the head, and he feels more comfortable when supporting it. Or he may have the same feeling on the top or other parts of the head. Vertigo, or vertiginous sensations are also common. In some cases the latter occur very frequently, and really represent illy-defined "phobia" attacks.

Bad sleep, either sleeplessness, disturbed sleep or dream-laden sleep, is a

not uncommon and distressing symptom. It is also very common for the patient to feel more fatigued early in the morning than any other time, a condition Cowles has well termed morning tire. This is the rule in neurasthenia, and occurs whether the patient sleeps well or poorly. Indeed, not rarely the patient feels more tired in the morning when he has slept well than when he slept poorly. In respect to the morning tire the disease is akin to melancholia, where the mental gloom is greatest in the early hours of the morning, the hours, too, in which suicide occurs most frequently.

I do not wish to dwell further upon the symptoms, but will merely call attention to a few others on account of special significance. Tremor and irregular heart action are often found in neurasthenia due to tea or tobacco, so that when these symptoms are found we will bear this common relationship in mind. A weak heart, not rarely found, may cause many of the neurasthenic manifestations. Perhaps I should again call attention to the fact that some symptoms have a special tendency to alarm the patient, such as palpitation, pain in the neighborhood of the heart, paresthesias, poor memory, etc., facts which the physician should again bear in mind. Some symptoms interest us for their rarity. I will merely mention a case, sent to me in consultation from a distance, a case of uncomplicated neurasthenia, in which all the hair of the head, beard and eyebrows had fallen out.

On the subject of diagnosis little need be said. The common clinical picture of neurasthenia is easily recognized. Perhaps I should mention that neurasthenia may occur at the same time as organic disease, of whatever kind, just as is true of hysteria. Indeed, not rarely have such patients been sent to me as nervous cases, and there was really independent nervous disease, but the hitherto unrecognized organic disease was the important condition as concerned diagnosis, prognosis and treatment. As to the diagnosis of such organic disease, it is only necessary to say that every case of neurasthenia should have a thorough examination.

The distinguishing neurasthenia from other nervous diseases—melancholia, hypochondriasis, and some other forms of insanity—has already been sufficiently reverted to under symptomatology. The question which will arise most frequently, whether the disease be neurasthenia or hysteria, need not detain us long. The well-marked cases with exhaustion, worry, apprehension and the like on the one hand, and the stigmata and paroxysms of hysteria on the other, will not be confounded. But there are very many cases in which some of the manifestations of both diseases appear, and which may be called hysteria by one, neurasthenia by another, or hysteroneurasthenia by a third, and it probably matters little which it is termed.

Neurasthenia is mostly a disease of adult life. It occurs in men more frequently than it does in women. Some cases are of comparatively short duration, weeks or months; others of a year or two, or a number of years' duration. Most cases get well. Beard says neurasthenics have a long and happy old age. In the smaller number of cases the disease results in permanent invalidism.

The first object in treatment is to remove, as far as possible, injurious influences, especially such as have been etiological factors in the production of disease—alcohol, narcotics, tea, coffee, tobacco, excesses of all kinds, overwork, worry, digestive disturbances, enteropneumosis, etc.

The next object of treatment is to secure adequate rest. The degree and manner of rest must vary in different individuals. In some, partial rest will suffice—retiring very early, lying abed until after breakfast or until noon, lying an hour after each meal, doing only a part of one's regular work, etc. In others, the profound nervous exhaustion may demand complete rest in bed, and here the rest treatment instituted by Weir Mitchell may be indicated. The latter is most efficient where the nervous symptoms are due to anemia and poor nutrition, or where the influences about the patient are such that isolation in itself becomes a haven of rest. But in many cases this treatment fails alto-

gether, and even injures the patient. Failures occur chiefly in cases with a strong mental element, or when the conditions of treatment do not meet the individual needs. For instance, isolation may permit the patient's mind to dwell constantly on himself, to be wrapped up in his morbid thoughts, while it keeps him away from the influences which help direct his thoughts in healthful channels. Complete rest may also strengthen an already existing tendency to chronic invalidism, a tendency in which the morbid subjective state entirely subverts the patient's will power. If such patients are put on the rest treatment it should be in a modified way.

Near to the question of rest comes that of exercise. Its benefit as well as possible harm should always be kept in mind. The golden rule of neurasthenia is exercise within the limits of fatigue. Excessive fatigue is always harmful. Often the sense of fatigue appears to be blunted, and the patient unwittingly exceeds the proper limits. The bicycle has come much into vogue in recent years as a healthful mode of exercise. That, as well as other outdoor exercises, are helpful in suitable cases.

An important part of treatment is helping the elimination of waste products from the bowels, kidneys, skin, etc. Possibly in this way we lessen auto-intoxication; at least such action should favor normal metabolism. Increasing the quantity of water consumed, which is often drunk in insufficient quantity, is treatment of this order. A course of laxative medication often proves to be the best tonic.

The diet should be nutritious and digestible. Meats, green vegetables, fruits, milk and eggs are best for most cases. Some do better with less nitrogenous food, possibly those in whom uric acid plays a part in the production of symptoms. As a rule, alcoholic drinks, tea, coffee and tobacco should be used moderately, or not at all.

It is needless to give the long list of drugs which have been and may be administered in the treatment of this disease. Of the tonics, some patients will do better with one, some with an-

other, and not a few will do best with none. Symptomatic remedies, the bromides, hypnotics, etc., are often very helpful, but should be used as little as possible.

Hydrotherapy, electricity and massage are applied to neurasthenics more than to any other class of cases. They are beneficial through their toning up influence, their oftentimes relieving special symptoms, and helping to maintain the hopefulness and courage of the patient. I will have time to give but a few hints as to their special application.

The simplest method of hydrotherapy is the cold sponge bath. This is often very invigorating, and applied at night may favor sleep. The hot abdominal compress, the wet pack, hot or warm bath, are also frequently a benefit in sleeplessness. The spinal douche, needle bath, cold bath, when well borne, have a more invigorating effect than the sponge bath. Many get both comfort and benefit from the Turkish bath.

All forms of electricity may do good, for they are likely to have an invigorating or soothing effect and to favorably impress the patient's mind. I have applied galvanic and faradic, static and sinusoidal electricity in manifold forms to neurasthenics, but my favorite applications are the mild galvanic current to the head, or the static sparks over the whole body. The first has a soothing effect on many neurasthenic symptoms, and, in my hands, has done more to favor sleep than any other electrical application; the second seems to have a decidedly invigorating effect, at the same time that it produces a stronger mental impression than any other application of electricity.

Changes of climate are sometimes a help, and desirable. A sea trip, the mountains, the north, the seashore, are what we are most accustomed to prescribe in this country. We cannot always tell in advance where the patient will do best, but the mountains are more commonly beneficial than the seashore. At the same time travelling in itself is far more frequently harmful than helpful. It can only be expected to do good when it succeeds in arousing the interest of the patient, thereby changing

the current of his thoughts. As a rule, it only increases the state of exhaustion, and does not succeed in awakening an interest in the patient.

A very important, often the most important, part of the treatment of neurasthenia is the moral treatment. Although I have quite recently spoken in part on the same subject (a paper on "Psychic Treatment of Disease," read before the Ohio State Medical Society), I deem it of such value that I shall not hesitate to speak of it again in this place.

Let us recall again common mental states of the neurasthenic. The patient is worried, perhaps discouraged, on account of long suffering and many disappointments. His mind may be filled with fears of permanent invalidism, of paralysis, insanity, heart disease, etc.; fears that may have been imparted to his physician and friends, or that may be brooded over secretly; fears that tend to maintain and increase his illness. Again, vague apprehension, or morbid fears or obsessions, are sources of distress and injury.

The first step in moral treatment is the thorough examination of the patient. This gives him a sense of confidence in his physician, a great aid in subsequent treatment. In most instances the physician will do well to avoid a custom, so common with the laity, and even with medical men, of laughing at the patient, or telling him there is nothing the matter with him; it is all imagination. Such a statement usually has a bad, not a good, effect; it discourages, not encourages. His feelings may be outraged at the idea that he is "putting on," while he knows his suffering is genuine. He is likely to feel that nothing can be done for him, and his case is hopeless. Instead of such a statement, which usually arises from a mistaken view of the nature of his case, he should be told the true character of his disease; that it is functional, not organic; that a somewhat protracted course and many ups and downs is the usual condition, and that his many fears are without foundation. If all this is carefully explained to our patients, and, at the same time, the fact is impressed upon

them that they are going to get well, in many instances we almost lift them from Hell to Heaven. Our assurances have made all the difference between hopelessness and despair on the one side, and hope and happiness on the other, conditions of mind which have such decidedly opposite effects on the course of a nervous disease. Yet it is to be remembered that often we have only started off the case satisfactorily, whilst exacerbations of the disease may again and again rob the patient of his confidence and plunge him into despair, conditions requiring the unceasing patience and efforts of the physician to combat and finally control.

A distressing and almost insurmountable condition in many instances is a habit of morbid thought, which has been gradually acquired, constantly thinking of self, constantly fearing or expecting recurrence of worrying symptoms, etc. Occupation, recreation, amusements, sometimes entire change of scene and surroundings, may help to break this morbid habit. We may do something in the control of this, as well as other distressing mental states, by laying out for the patient a regular plan of his daily life, how every hour is to be spent. At the same time we must try to strengthen his will power. Systematic exercise and employment, undertaking difficult or painful tasks, etc., are all efforts in this direction, and each step forward makes future success more easy.

The morbid fears and obsessions require special attention. The fears coming on in high, open, closed places, etc., are attended by symptoms—palpitation, vertigo, etc.—which arouse the thought in the patient's mind that he would faint, be paralyzed or have a stroke of apoplexy if he did not escape from the fancied scene of danger. This secondary fear increases the intensity of the attack, and thereby the strength of the morbid habit. Now teach the patient that all this is only nervousness, that no danger whatever accompanies an attack, and its hold upon him will be lessened immediately, so that in milder cases he can soon control it altogether. Goethe, who had such fears in high places, conquered them by climbing

frequently in the tower of the Strassburg Cathedral. When such attacks come on very frequently, so that they occur on very slight provocation, the patient should first attempt to conquer the slightest ones. For instance, if they occur in open places, crossing streets and the like, the patient should first try to overcome the fear of crossing narrow streets, and slowly progress to conquering those arising on crossing broad streets, etc.

Obsessions usually bring a host of unfounded fears to the patient's mind; that he is becoming, or is already, insane; that he may kill a beloved one, if his obsession be of that character, etc. Assure him that these fears have no foundation, that the obsessions are not related to insanity, are merely nervous symptoms, and that no case is recorded in which such an impulse in a merely nervous subject led to an act of homicide, and such relief is given to the patient's mind as is in itself a long stride toward full recovery.

The act of unbosoming himself to his physician, making a confidant of the latter, is also a great source of relief and a therapeutic aid, for he has often concealed this state of mind even from those nearest to him.

The milder cases of obsessions can be conquered like the mild cases of morbid fears, by the determination not to think of them and to conquer them. Here, too, the conquest can be assisted by constant mental occupation, work, pastime, change of scene, etc., always remembering in selecting such aids to avoid what especially arouses the morbid idea.

As with other nervous symptoms, worry and overwork increase the morbid fears and ideas, while removing such influences and improving the general health lessen them. It is also true that in the treatment of these morbid fears and ideas, as well as many other symptoms of neurasthenia, we can accomplish much by suggestion. Lead the patient to believe that the drugs or other therapeutic agents employed are going to remove the symptoms or cure the disease, and it will help greatly to their mastering and disappearance.

[FOR DISCUSSION SEE P. 657.]

A NOTE ON CALOMEL IN THE TREATMENT OF TYPHOID FEVER.

BY HENRY WALD BETTMANN, M.D.,

CINCINNATI,

PATHOLOGIST TO THE CITY HOSPITAL.

It is probable that the profession will never agree upon the best method of treating typhoid fever. Long before unanimity of opinion will prevail typhoid fever will, by prophylactic measures, have ceased to be a common disease. Until that blessed result is achieved, however, we must study the resources at hand and select the method for daily use which promises the best results. Personal experience is not of itself a reliable guide. One's own results may seem satisfactory, and yet better methods producing better results may exist.

The majority of physicians are content with the expectant treatment of typhoid fever, and differ from each other only in detail. The results seem satisfactory, judging from the number of the defenders of the expectant treatment, and yet under that treatment typhoid fever is a protracted disease, running a course of four to six weeks, and often terminating fatally. Most adherents of the expectant treatment rely to a great extent upon the nursing; they believe that the marked diminution in mortality from typhoid fever within recent years is due to more competent nursing, and nurses have in a measure been thereby justified in speaking of *their* cases of typhoid fever.

A more efficient way of treating typhoid fever than is embraced in the term "expectant method" undoubtedly does exist. The adherents of the Brand method and of the antiseptic method cannot all be mistaken. Results have been achieved by these methods which have not been attained by expectant treatment. We are told by the older and most conservative members of the profession to treat the patient, not the disease. Why not the disease? Is typhoid fever such a mysterious affection that efforts to destroy it at its root are vain? Rightly considered, typhoid

Society Reports.

ACADEMY OF MEDICINE OF CINCINNATI.

OFFICIAL REPORT.

Meeting of May 9, 1898.

The President, LOUIS SCHWAB, M.D.,
in the Chair.

W. H. CRANE, M. D., Secretary.

DR. PHILIP ZENNER read a paper on
Neurasthenia (see p. 643).

DISCUSSION.

DR. F. W. LANGDON: In bringing this subject before us I think the essayist has conferred a favor upon the Academy, for the affection is one which stands upon the border line of so many pathological states; functional states, it is true, but if we are to eliminate the functional states from the practice of medicine there would not be so much for many of us to do, not only in neurology, but in many other departments. It is a very nice question at times to determine when the case ceases to be neurasthenia and when it goes over into or is associated with hysteria, hypochondriasis, or even melancholia, and I regret that the essayist did not favor us with the symptomatology, which he omitted to read, because authorities are not fully agreed on the precise limits of neurasthenia. I think we are all puzzled with cases at times that are difficult to classify.

Respecting the causes, I agree with the essayist that we must look in two main directions, the hereditary predisposition and the malnutrition, to whatever cause it may be due. I question, however, whether all cases are to be uniformly benefited by rest. I thought possibly the essayist did not mean to convey just that idea himself. Rest is a comparative thing, and we all know that in some states of mind absolute motor inactivity may be anything but restful. It may be attended by a more constant worry than the over-activity of another case. The general principle that the output of energy is to be limited to the capacity of the parts is a sound

physiological one. I would say, in a word, that he who best nourishes his patient best meets the indications of the neurasthenic state, as he does in so many other diseases.

The question has been brought up of the disease being pre-eminently an American one—the American disease, so-called. Probably it is an American disease more than a disease of any other nationality, but yet I think we find quite as frequently that the foreigner who comes to America is just as likely to be neurasthenic in the course of time. In other words, it is not particularly the American constitution so much as the American habits of life. For instance, look at the business man. He gets up at 5 or 6 o'clock, six, ten, fifteen or twenty miles out in the country, swallows a hasty breakfast and makes the rear end of his train on the run. He goes on his scanty breakfast until 1, 2 or 3 o'clock, and then slips out and gets a hurried lunch. The activity, the rush, the pressure, the rate of energy expenditure which the average business man undergoes, are too much, when he attempts to subsist on what is inferior in quantity and possibly in quality. About the only meal such a man gets is his dinner at night, when he is too exhausted to get the full benefit of it. I think we can take a lesson from our English and German brethren, who have four or five meals a day and a little social recreation. They shut up the bank at 12 o'clock and go out to lunch, down to the office boy, and come back at 2 o'clock. This would seem a primitive way of doing business here, but they do it, and are even able to loan us money when we need it. It may be that in a country like this, where every man has greater opportunities than in some of the other countries, that the incident competition is inseparable from our mode of life, and we must pay the penalty in some shape. Nevertheless, much harm is done by the laity, and even by the profession, in promulgating the doctrine that everybody eats too much anyhow. I do not think that is true of the average American citizen. I think it is true he does not eat enough, because he does not take time to do it. So

that if we look for the reasons why it is the American disease, I think it is more the habits of the American man than the character of the population, etc., that we have developed upon this continent.

I have been glad to hear the essayist's ideas on the subject of treatment, but I regret he did not give us his views of the outlines distinguishing it from the other closely allied affections.

DR. A. RAVOGLI: In the field of practice which I pursue, very often I find cases of neurasthenia associated with posterior urethritis and cases of neurasthenia in consequence of syphilis. I agree with the opinion of the essayist, that worry has a great deal to do in producing neurasthenia, but I must state also this fact, that sometimes an individual affected with chronic posterior urethritis, or having a stricture, although not suffering apparently, has a pulse of 100 or 120, is unable to sleep or eat—in one word, is in a complete neurasthenic condition. In this case if a sound is inserted and the stricture dilated, the mucus behind the stricture emptied out, the patient will feel much better in two or three days. The neurasthenic symptoms will disappear, and if he neglects to have the stricture treated he falls again into the condition of neurasthenia. In these cases I think that the mucus, or the purulent secretion which remains inside the posterior urethra, has a great deal to do with the production of neurasthenia, and it is not only the worry which the patient has, but rather a kind of toxic condition produced by the secretion retained in the posterior urethra, which is furnished with so many sensitive nerves. In syphilis I have often found cases of neurasthenia. The syphilis diminishes the quantity of the blood corpuscles and the hemoglobin, and in consequence a chloremic condition, probably the neurasthenic condition, is the result. In some other cases I have seen neurasthenia in consequence of too much treatment in syphilis. I have had some cases go, for instance, to Hot Springs, where they sought to obtain their health, who were subjected to enormous doses of mercurial ointment, and enormous doses of iodide of potassium, and who were com-

pelled to take hot baths beyond their endurance. They came back in a complete neurasthenic condition, and the only way I could treat these patients was to stop entirely the anti-syphilitic treatment, and give only mild tonics, good diet, etc., and they began to sleep at night and began to eat, when before they could not eat nor sleep. I think that this exaggerated treatment in some cases of syphilis is very often the cause of neurasthenia in some patients. Sometimes the toxic condition of the system, sometimes the toxins resulting from the bacillus of syphilis, and sometimes also the exaggerated treatment of syphilis, are able to produce neurasthenia in patients suffering from these diseases.

DR. H. M. BROWN: I want to speak in reference to some remarks made by the essayist in the treatment of these cases, recommending that their dread of doing some sort of violence to themselves or others be regarded as not a serious matter. I think the neurasthenic is an insane individual. I think there is no question but that neurasthenia is insanity. It seems there is nothing that occurs to the individual's mind which may not become an over-ruling passion. I base these remarks on three patients. The first was a young man of excellent family. He had a number of relatives who were brilliant, and himself above the average in intelligence. He believed he would some day commit suicide unless his friends would help and encourage him when in this condition of despondency. He was a publisher, and would occasionally get more money than was his custom and would gamble with it. But at the same time the young man was sane, so far as we accept that term. In one of those conditions he said to some one that he felt he would have to commit suicide, and he did shoot himself through and through. He recovered, however, and is now a better man than ever before.

The second case was that of a young nurse, who had committed some sexual indiscretion with another female. She brooded over it a great deal, and said that sometimes she felt she would have to commit suicide. I made light of it, as the gentleman recommended, told

her those patients never committed suicide who had these impressions, that they would all go away and she would be all right. Occasionally I would see her and she would say it was a foolish notion, but she could not overcome it. They sent for me one day, but by the time aid reached her she was dead. She had taken cyanide of potassium.

Another case, a woman of high station in life, so far as position and environment were concerned, with a large amount of money and standing of the highest character, was taken with neurasthenia. There was a depressed state, a condition of despondency, bad nutrition, probably based upon indigestion superinduced by too much eating and luxury. She was treated by a number of physicians in this city, and was in the Good Samaritan Hospital a while. She dreaded everything, and was afraid to go upstairs, afraid to look out of a window, afraid to cross the street—she had all of those morbid fears. In the most yearning, pleading tone she would beg to be relieved of the awful, dreadful fears. The dread of meeting her friends, of going through a door and so on, was becoming almost unbearable. She said she felt sometimes as if she should commit suicide. Her treatment was unsuccessful, and she went home and lived without treatment for a time. Then some one in New York was suggested, and her brother, sister and daughter went with her there. They stopped at one of the best hotels and had rooms on the sixth floor. One evening they were going to the elevator to go down to dinner. Those who attended her were ahead and she stepped back and jumped out of the window and killed herself.

These are three cases which had the impression that under some circumstances they might be tempted to commit suicide during their despondency. The expression of that apprehension was made light of, as recommended in the paper this evening, and each one committed suicide. I could mention other cases where suicide was averted by careful management and instruction to the friends.

DR. W. E. KIELY: I am a good deal disappointed. I came here with the

expectation of hearing some points brought out which would enable me to make a diagnosis of this condition. My experience has been limited to three cases, and because of that limitation I want more information on the subject. I want to know when I can make a differential diagnosis from hysteria and melancholia, and when neurasthenia ends and some lesion of the brain begins. Dr. Langdon saw a case with me about a year ago, a gentleman beyond the age of sixty, a typical neurasthenic. There had been a death in his family. He began with sleeplessness, loss of appetite, etc. He began wasting away, and in six months from the time I saw him he died. This man, although he had every means in life to make him comfortable, gradually and steadily went down. He took milk, beef broth, egg, egg-nog, everything we could think of to nourish him, and yet he steadily lost in flesh. At one time he would inform me his kidneys were affected. I would examine the urine before him to assure him there was nothing wrong. Another time he could not walk down stairs; another time he had heart disease. There was scarcely a disease he heard of that he did not have it. Some six months after treatment began he showed symptoms that suggested to me bulbar paralysis. In the early morning, twelve hours after the doctor's visit, he died suddenly. I thought he had some brain lesion. I am not at all certain of neurasthenia in this case.

The first case I was able to recognize was in a lady convalescent from grippe. I tried my persuasive powers to have her take exercise out of doors. The case passed from under my care to a gentleman who makes a specialty of nervous diseases, and he tried the rest treatment and cured her.

Another case that I recall was in a man who said he was a subject of malaria. I never could find any elevation of temperature or any evidences of malaria, and when I assured him he did not have malaria he had something else. He was a typical hypochondriac. This man passed from under my care and afterwards got the rest treatment. Finally he merged from under that treat-

ment about as well as he was when he went into it. I asked the nurse how he was, and he said that about the time the pains left his side he had them in his head, and so on.

I want the doctor to tell us how to make a differential diagnosis in these cases, and in what cases we should use the rest treatment.

DR. ZENNER: I omitted to read the part on symptoms because I thought my paper was so long, and I considered that something in etiology and treatment would be more interesting to the Academy than that of symptomatology, which I have no doubt is reasonably well known to all.

As regards the question of diagnosis, which Dr. Kiely asked me speak upon, to put it briefly, I may say that we have a set of nervous symptoms, and we have first to determine whether or not we can discover any other disease. In the case of his patient who died, I suspect there may have been something else. There is often some hidden lesion beyond our ken, and perhaps in his case some of the abdominal or thoracic viscera may have been affected. We must next try to distinguish neurasthenia from other functional nervous diseases, and it does gradually merge into others of this category. For instance, one common symptom is mental depression. Now this mental depression is often a physiological state. The cause is possibly the death of a wife, or some other one of the family, or financial losses and he is worrying over that, or he is worried about his disease, thinks he is going to become insane, or this, that or the other. And again, there may be mental depression quite independent of such cases, and in that regard the disease is like melancholia. The only difference is that in melancholia the depression becomes more and more profound and is accompanied to a far greater extent than in neurasthenia with suicidal tendencies, and usually with the presence of delusions, although we do have melancholia without delusions. That is all that distinguishes the two affections. The two merge into one another. Each for himself can make the dividing line. And so it merges into other functional nerve

diseases—for instance, hypochondriasis. There is ceaseless worry about this condition or that, an abdominal condition, if you will, and the worry becomes hypochondriasis or neurasthenia, as you please. Hypochondriasis, as a rule, has more of the character of a degenerative disease than neurasthenia, but the two may merge into one another, and only special conditions lead us to say the disease is this or that. Among functional troubles, we may speak of morbid ideas, the phobias, the obsessions, etc. They occur to a considerable extent in neurasthenia, not by any means in all cases, perhaps not in 20 per cent. of the patients, but they occur and must be considered. But usually they may be placed in a class of their own, or the case may approach in character to paranoia. I will say nothing here of the differentiation between neurasthenia and hysteria.

Now as regards what Dr. Brown spoke of in his three cases of fears that finally resulted in suicide. Some of them were not neurasthenics, I suspect. As I said, not every case of neurasthenia has these fears, and these fears are more frequently a disease of their own. But when I spoke of the absence of danger in these cases I remarked that you can assure your patient that in merely nervous cases imperative ideas never drive to homicide. Krafft-Ebbing states that no case of mere nervous disease is recorded in which imperative ideas resulted in homicide. How great a relief such a knowledge is to those with such imperative ideas, a mere looker-on can scarcely appreciate. The speaker instanced a case just under observation. It is quite different with suicide. It requires much less to drive one to suicide than to homicide. No case with mental depression should be treated lightly by the physician, though he should try to make the patient think lightly of his disease.

I think Dr. Ravogli is quite right in the part which syphilis and the treatment of syphilis plays in the production of this disease. We do not know how far intoxication plays a part in the etiology of these cases, but the impairment of the general health doubtless had

much influence in causing the nervous disease. In that way the stricture he spoke of, with the attending sleeplessness and pain, induced the neurasthenic state. I have a number of patients in my mind in which I have seen neurasthenia brought on by treatment of the posterior urethra. I remember several cases in which treatment was instituted for the cure of impotence which produced neurasthenic symptoms. We should bear in mind when we are subjecting a patient to heroic treatment of any kind for the removal of nervous symptoms that we may really injure instead of benefit him by the measures instituted.

Precautions Against Malaria.

Mr. William T. Hornaday says:

"After living in the most malarious jungles on earth, in the midst of miasmatic swamps, drinking swamp water, and often having to eat unaccustomed and badly cooked food, I never had but one touch of jungle fever, and that only laid me up for six or seven days. I owe my excellent health to two or three precautions. I never slept on the bare ground or in the rain, and always under shelter. I always wore light flannels next to the skin, and never slept in damp clothes. Whatever else I might have to do without, two changes of flannel underwear besides that I had on were always at hand. Take from five to six grains of quinine every morning in a cup of hot coffee, if you have it; if not, then in hot water. Have your shoes to fit you, even if you must buy them yourself, though the United States is furnishing its troops with an excellent marching-shoe. With these precautions and a dose of some light laxative once a week, there need be no more fear of fever in Cuba than there is in Missouri."

—*N. Y. Med. Record.*

In uterine disorders with hysterical symptoms and mental depression at the menstrual period, a small dose of *cimicifuga racemosa* every two hours, for a few days preceding the epoch, will produce admirable results.—*Med. Summary.*

Selections.

FROM CURRENT MEDICAL LITERATURE.

Localized Collective Investigation.

In spite of the determined opposition of some medical journals and of certain practitioners, by far the majority of whom have never given it any trial, the subject of serum therapy is advancing its hold upon the profession, as was only inevitable that it should from the conspicuous success attained by the antitoxine treatment of diphtheria. The position once established as regards even one of the group of germ diseases leads unavoidably to the logical conclusion that continued investigation will sooner or later bring all these dread diseases under the control of serum treatment. Such being the case, the multiplicity of articles and papers bearing on this subject is to be regarded with favor; for, though undoubtedly many will fail to substantiate their propositions, there will be certainly some grain winnowed from among the chaff, and even of those that substantively will sink into oblivion, who shall say that some chance remark or suggestion therein contained may not prove to be the means whereby other and more successful observers will find the right track, and, by following it perseveringly, ultimately attain the desired goal?

These remarks have been prompted by a paper read before the Medical Society of the State of California, in April, by Dr. Geo. L. Cole, and published in the *Pacific Medical Journal* for May. It is not so much that the paper contains any original addition to our knowledge as that it displays a method of procedure on the lines of collective investigation which cannot be too highly commended. The more localized efforts of practitioners of wide repute in their own districts will often succeed in reaching the rank and file of the profession where more centralized efforts in that direction fall short of attaining commensurate results. It is only necessary, then, for some large central

body to itself collectively investigate the collective investigations of these local engineers, to render available to the profession such a mass of cumulative evidence as shall shorten materially the time during which any therapeutic measure remains "on trial."

Dr. Cole addressed to all the members of his medical society and several other physicians of his acquaintance the following series of questions:

1. In what percentage of your cases of diphtheria do you use the antitoxine?

2. In cases where the antitoxine has been used in your practice, about what percentage has recovered?

3. What dosage (in units) do you use for an average case in a child of seven years?

4. What other serums or antitoxines have you used?

5. Have you seen any positive effect from other antitoxines than that of diphtheria?

6. If so, what ones, and with what effect?

Out of three hundred circulars, one hundred and fifty-five (a very fair proportion) were returned with replies.

As regards diphtheria antitoxine, only four expressed themselves as in any way antagonistic to its use, and not one of them had had any personal experience of the treatment. One considered it one of the numerous fads in medicine, and so apparently condemned it without trial. A second, who, however, had observed the results of others, though of how many or of whom we are not informed, is firmly convinced that a proper local with general treatment far outweighs in value that with serum. A third prefers that others experiment and first establish its therapeutic value, while "one very prominent and talented member of the society has had no trouble in curing all cases of diphtheria under his care during the last eighteen years with rational treatment and without sequelæ of disease or of treatment" (?) As Dr. Cole remarks, this man we certainly cannot blame for holding to his old line of treatment.

With regard to the practice adopted by two respondents of using the antitoxine not only in all established but

also in all suspected cases, while, as Dr. Cole points out, this rather sustains an objection which has been made that many cases of indifferent throat diseases are mistaken for diphtheria and here serum reaps the honor, it also shows something of far greater importance, viz., that the serum is a comparatively harmless remedy.

The serum treatment of tuberculosis is, of course, far behind that of diphtheria at present. Still, even the replies on this question carry some encouragement. Twelve gentlemen had used various serums, of whom three reported one or more recoveries and four returned negative results. Several reported positive improvement, two spoke of results that were either negative or positively harmful, and one mentioned an apparent recovery. Dr. Cole remarks that no deduction of any great value can be derived from these reports, except to show that the majority of those who have reported on the use of the serum believe it does good.

The author adds the results of his own experiences with the Antiphthitic Serum T. R. (Fisch), and his conclusions are that it does positive good in certain cases, viz., those cases in which there is nearly enough resisting power in the individual to throw off the disease. These cases he considers curable, and he adds: "Of this I am certain, that no other remedy used by me in tuberculosis has done as much good, and I shall continue to use it in what seem to me properly selected cases until something better is found." He regards it as more positive in its results than other preparations, and not so apt to cause inconvenience to the patient in the way of soreness or abscess; and, moreover, the dose is smaller.

Of tetanus nine cases were reported, with six recoveries, and it is pointed out that in the *Philadelphia Medical Journal* for March 26 four cases are reported, two of which treated with narcotics and anti-spasmodics, had resulted in death, while in the two treated with antitoxine the patients had recovered. Antistreptococcus serum was the subject of only two reports, both on cases of puerperal sepsis, the strepto-

coccic nature being demonstrated microscopically, and the results were stated to be most gratifying, the temperature falling rapidly and the cases going on to a prompt recovery. Dr. Cole insists upon the necessity of verifying the nature of the infection microscopically, and refers to a case of his own in which, serum having failed, subsequent microscopic examination demonstrated that the infection was due to the staphylococcus.

This article affords a fair example of how much may be done locally on the lines of collective investigation with results more wide-reaching, if they should be subsequently collated by a central authority, than is ever likely to be attained by an investigation originating centrally. It is true that if every medical man should take it into his head to flood the profession with circulars requesting answers on any subject in which he might be interested, the very immensity of the process would soon kill itself; but the personal element would have much to do with success in such a scheme, and many leading practitioners in different localities could succeed in obtaining answers from their colleagues as a personal matter where a mere official request would fail. If those who are interested in such matters would supplement the circular method by spending some of the time devoted to personal intercourse in eliciting the desired information in the course of conversation, they would probably largely increase their field of operation; for, while there is among the few a *cacoethes scribendi*, it is equally true that among the many there exists a still more marked *constipatio*. — Editorial in *New York Medical Journal*.

Chronic Gastritis.

A report of a very severe case of gastritis was freely copied in medical journals during the year 1896, in which glycozone was successfully used.

At that time, J. W., aged thirty-eight, a blacksmith, came under my care. His illness began in 1894 with the usual symptoms of gastritis. In January, 1895, he had become so much worse that he placed himself in the hands of one of

our best physicians, under whose care he continued until November of the same year, when I was consulted.

After hearing his history and the treatment given, I urged him to return to his physician, insisting that nothing more could be done. My protest was in vain.

Examination revealed an emaciated, thin and badly nourished body; his eye, skin and color fair, though pale; his temperature normal; the bowels inclined to constipation with occasional diarrhea with whites, pasty offensive stools; the lungs, heart and kidneys healthy; the liver a trifle small.

There was no painful point and no evidence of enlargement, tumor or ulcer. He was so thin that the abdomen could be most thoroughly examined. His tongue was heavily furred, red at the tip, indented at the edges, and the papillæ red and prominent.

He complained of being unable to take either solid or liquid food even in small quantities without causing heaviness, weight, oppression, pyrosis, eructation of gases, nausea and finally headache and vomiting.

Since 1894 these symptoms had increased in severity; the nausea never ceased and this whole array of complaints would gradually accumulate in force and energy, overwhelming his system with an attack of headache and intermittent vomiting, that would last from three to five days.

In 1895, these storms growing worse rendered his life almost unbearable. I had been attending him about a week, when one of these attacks occurred. He had been vomiting one day before I saw him. The scene was truly pitiable. I found my poor emaciated patient in a small darkened room scarcely able to raise his head, gagging and straining constantly, bringing up finally by the greatest of efforts, a teaspoonful of white glairy mucous; his head bound tightly or wrapped in ice cloths; his eyes congested; his cheeks hollow; his skin sallow and pale; his face bespeaking the intense agony he suffered, begging and pleading to those around him for relief from the horrible nausea and retching.

I remained with him an hour and during that time he was not free for five minutes from efforts at vomiting. His sleepless, aching brain seemed racked to distraction. He would gag, vomit, and fall back exhausted.

This continued three days, gradually lessening. Sleep came only through exhaustion. Every particle of food (liquid or solid) was promptly vomited. During these attacks, the temperature was increased from 99 to 103°.

These attacks were always of a similar character, and from November 1, 1895, to July 3, 1896, occurred every ten days or two weeks.

The only perceptible relief came from the use of small doses of diluted hydrochloric acid between the attacks and a solution of cocaine and morphine during the paroxysm.

About July 3, 1896, I read the article referred to above, and in desperation and despair of ever relieving him, I ordered glycozone one-half, then one drachm, well diluted, twenty minutes before meal time.

In a few days he said he felt better; within a week he repeated the assertion. To the utter astonishment of myself and his friends, one, two, four and even six weeks passed without a reoccurrence of his severe symptoms.

About August 20, he was so much improved, that to hurry matters, I concluded to try lavage again. This was done at 5 P.M. and at 10 that night he was in the throes of an attack, which lasted two days.

He then resumed his glycozone and continued to improve till October 15, when on account of inactivity of the bowels and costiveness, he was given two grains of calomel, which brought on a slight headache and considerable nausea.

He had already been taking more food, but for this time it was increased in quantity and character, eating three fairly good meals a day, and enjoying them.

After beginning the use of glycozone, the acid was continued a few weeks, after meals, then left off entirely. No other medicine was used, except occasionally a pill of aloin, belladonna,

strychnia, cascara when bowels were sluggish.

To him glycozone proved the greatest boon, and to me, the relief given was simply wonderful.

It is useless to add that I have used the remedy in many cases since, and have met with excellent and even astonishing results.—LOUIS A. KENGLA, M.D., in *New England Med. Monthly*.

Errors of Diagnosis in Orthopedic Practice.

Dr. DeForest Willard (*Philadelphia Med. Journal*) says that one of the most common errors of diagnosis in orthopedic practice consists in ascribing to "rheumatism" the inception of most serious joint-disease. In rheumatism the symptoms are acute and active. There are sudden onset, local heat, rise of temperature, visible fever, evident swelling, and usually more than one joint involved. In chronic tuberculous cases the onset is slow, and there is entire absence of the signs mentioned. He concludes with the following rules for reference:

1. Discard all idea of rheumatism of a single joint in children (especially in the hip) unless it is positively proven by acute symptoms. Tuberculous disease is much more probable.

2. Any child may have local tuberculosis of a joint, no matter what its ancestry; heredity signifies only degree of resistance.

3. Do not attribute to "habit" a persistent limp. An inflammatory or paralytic cause is more probable.

4. All persistently fretful infants (especially those that cry when moved) should be carefully examined for evidences of spinal spondylitis. Older children, with stubborn irritation of the lung, stomach or intestine, should also be critically examined. Early diagnosis and treatment will accomplish excellent results.

5. In lateral curvature of the spine the indiscriminate and unskillful use of mechanical appliances does harm, while to neglect these means of fixation in spinal caries is ruinous.

6. To "let alone" a curable congenital bone-deformity after the first

week of life is to lose the golden opportunity for cure.—*Med. and Surg. Reporter.*

Coffee as a Restorative Medicine.

Jonathan Hutchinson in his *Archives of Surgery* says that he has long been in the habit of prescribing coffee as a medicine in certain states of great debility. He regards it as a remedy quite unique in its usefulness in sustaining the nervous energy in certain cases. Apart from its general utility, and its well-known value as an antidote to opium, he has found it of especial service after operations where anesthetics had been used, and in states of exhaustion where alcohol had been pushed and a condition of semi-coma followed. In these latter cases he has sometimes prescribed it as an enema when the patient could not swallow, and with the best effects. In many cases where death may be close at hand, such an expedient as this may even be the means of a permanent restoration to health. Tea and coffee seem to be much alike in many respects, but the latter is greatly preferable as to its sustaining power. It would be a great advantage to our working classes, and a great help towards the further development of social sobriety, if coffee were to come into greatly increased use, and if the ability to make it well could be acquired. As an example of the difference of effect of tea and coffee upon the nerves, the writer notes what he believes many sportsmen will confirm, that it is far better to drink coffee than tea when shooting. Tea, if strong or in any quantity, especially if the individual be not in very robust health, will induce a sort of nervousness which is very prejudicial to steady shooting. Under its influence one is apt to shoot too quickly, whereas coffee steadies the hand and gives quiet nerves.—*N. Y. Med. Times.*

Acne.

Spray with a $\frac{1}{2}$ to $\frac{1}{8}$ per cent. solution of resorcin, and follow by the application of an ichthyol plaster; after the disappearance of the acne an ointment of chrysarobin, at first 20 per cent., then 10 per cent., should be applied.—*Med. and Surg. Reporter.*

Bibliography.

HARTLEY - AUVAR D. SYSTEM OF OBSTETRICS.

Third (1898) edition, 436 pages, 543 illustrations. Revised by JOHN D. HARTLEY, M.D. Cloth, \$4.00. J. B. Flint & Company, 104 Fulton St., N. Y.

It can hardly be said that at the present time any work on obstetrics "fills a long-felt want," yet there are many points about this system that seem to round out some more or less rusty ideas we may have previously entertained.

One's first thought is surprise that any book on this subject could contain so many different subjects, each forming a chapter, but after reading the book the idea comes that works devoted to a similar line of work would be more valuable were they more complete. None of the chapters are very long; indeed, the large number of illustrations prevents that, and also relieves the tedium that a large amount of dull type would entail. The next best way to study medicine after the clinical method is by the study of good illustrations embellished with more or less explanatory text, and the author has evidently made this his precept in the preparation of the present work, for he has left none of the science unillustrated, and many of the illustrations have never before appeared.

The book begins with an easily written chapter on "Menstruation and Fecundation," followed by descriptions of the growth of the ovum and fetus, whence he at once proceeds to the study of pregnancy and parturition. The articles on delivery and descriptions of the various positions and presentations are remarkably clear, and would repay students especially to read them.

The treatment of the various complications of pregnancy and labor presents very little that is new; indeed, results are so satisfactory under the well-beaten paths that it is doubtful if any radical measures will meet with any favor. The book is to be greatly commended.

M. A. B.